Articles

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The Behavioral Divide

A Critique of the Differential Implementation of Behavioral Law and Economics in the US and the EU

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Abstract: A behavioral divide cuts across the Atlantic. Despite the recent surge of behavioral analysis in European academia, a scrutiny of decisions by courts and regulatory agencies in the US and the EU reveals striking differences. While in the US rulings by courts and regulatory agencies progressively take insights from behavioral economics into account, EU courts and agencies still, and even increasingly, cling to the rational actor model. These inverse trends can be uncovered in the interpretation of legal concepts of human agency, ie, of those elements in a legal order which refer, implicitly or explicitly, to a model of rationality of human actors. More particularly, this paper reviews the concepts of consumers and of users, in consumer law and product liability respectively, to underscore the claim of the behavioral divide. Importantly, the divergence between EU and US private law practice calls for a normative evaluation. In the face of empirical uncertainty about the existence, direction and intensity of biases, the most attractive legal concept of human agency is a pluralistic one, assuming the simultaneous presence of boundedly and fully rational actors. In concrete applications, this paper shows that a pluralistic perspective urges a revision of the concept of the reasonable consumer, both in US and EU consumer law. Furthermore, such a view leads to the adoption of a more boundedly rational user concept in product liability. The pluralistic, yet more boundedly rational concepts thus have far-reaching consequences both for private law theory and its concomitant case law.

Résumé: Une division comportementale traverse l'Atlantique. En dépit de l'essor récent de l'analyse comportementale dans l'académie européenne, un examen des décisions des tribunaux et agences de régulation aux Etats-Unis et dans l'Union européenne révèle des différences frappantes. Tandis qu'aux Etats-Unis ces institutions tiennent compte progressivement des conclusions de cette ana-

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lyse, en Europe elles sont encore et peut-être de plus en plus attachées au modèle de l'acteur rationnel. Ces tendances opposées se révèlent dans l'interprétation des concepts juridiques de l'action humaine, c'est-à-dire, les divers éléments dans un ordre juridique qui se réfèrent, implicitement ou explicitement, à un modèle de rationalité humaine. Plus particulièrement, le présent article explore les catégories des consommateurs et utilisateurs, en droit de la consommation et en droit de la responsabilité du fait des produits respectivement, au soutien de la thèse d'une division comportementale. Surtout, la divergence entre les Etats-Unis et l'Union européenne dans la pratique du droit privé revendique une évaluation normative. Face à une incertitude empirique relative à l'existence, orientation ou intensité des biais, la conception la plus convaincante de l'action humaine est d'ordre pluraliste, supposant la coexistence d'acteurs d'une rationalité pleine d'un coté et limitée de l'autre coté. Concrètement, cet article montre qu'une perspective pluraliste réclame une révision du concept du consommateur raisonnable, dans le droit de la consommation américaine et européenne. Par ailleurs, cette approche mène à une conception de l'utilisateur à la rationalité limitée en matière de responsabilité du fait des produits. Ces conceptions, plurales et laissant place davantage à la rationalité limitée, ont des conséquences étendues à la fois pour la théorie du droit privé et sa pratique judiciaire.

Zusammenfassung: Eine verhaltenswissenschaftliche Spaltung (behavioral divide) verläuft mitten durch den Atlantik. Trotz des jüngsten Anstiegs verhaltenswissenschaftlich orientierter Analyse in den europäischen Rechtswissenschaften fördert eine genaue Betrachtung der gerichtlichen und behördlichen Entscheidungen überraschende Unterschiede zwischen den USA und der EU zutage: Während in den USA diese Entscheidungen immer stärker verhaltensökonomische Erkenntnisse berücksichtigen, sind deren europäische Gegenstücke immer noch, und sogar zunehmend, dem rationalen Verhaltensmodell verhaftet. Diese inversen Tendenzen können in der Interpretation rechtlicher Modelle menschlichen Handelns offengelegt werden, mithin in der Analyse solcher Elemente einer Rechtsordnung, die implizit oder explizit auf einen bestimmten Grad von Rationalität menschlicher Akteure Bezug nehmen. Dieser Artikel untersucht im Einzelnen die Leitbilder von Verbrauchern und Nutzern, im Verbraucherrecht und im Produkthaftungsrecht respektive, um die These des behavioral divide zu untermauern. Zugleich verlangt diese Divergenz zwischen der europäischen und der US-amerikanischen Praxis des Privatrechts nach einer normativen Wertung. Angesichts empirischer Unsicherheit über die Existenz, Richtung und Intensität von kognitiven Verzerrungen ist das attraktivste rechtliche Modell menschlicher Handlung ein pluralistisches, das die gleichzeitige Präsenz vollständig und beschränkt rationaler Akteure voraussetzt. Dieser Artikel zeigt in konkreten Anwen-

dungsbeispielen, dass eine derart pluralistische Perspektive eine Revision des Leitbilds des mündigen Verbrauchers, sowohl in den USA als auch in der EU, notwendig macht. Zudem impliziert die pluralistische Herangehensweise ein stärker beschränkt rationales Bild des Nutzers im Produkthaftungsrecht. Diese pluralistischen, zugleich aber auch stärker beschränkt rationalen Konzepte haben daher weitreichende Konsequenzen sowohl für die Theorie des Privatrechts als auch für das sie begleitende Fallrecht.

I Introduction

Behavioral law and economics, the happy merger of cognitive psychology, experimental economics and the law,[1] has evolved into one of the dominant paradigms of legal discourse in the US within the last 15 years.[2] Today, it is increasingly discussed in legal academia in the EU as well.[3] This theoretical debate, however, is simultaneously of supreme importance for the *practice* of law – for concrete

1 See, eg, C. Jolls, C.R. Sunstein and R. Thaler, 'A Behavioral Approach to Law and Economics' 50 *Stanford Law Review* 1471 (1998); R.B. Korobkin and T.S. Ulen, 'Law and Behavioral Science: Removing the Rationality Assumption from Law and Economics' 88 *California Law Review* 1051 (2000); J.D. Hanson and D. Kysar, 'Taking Behavioralism Seriously: The Problem of Market Manipulation' 74 *New York University Law Review*630 (1999);C. Jolls, *Behavioral Economics and the Law* (Boston: now, 2011).

2 Cf for this assessment R. Bubb and R.H. Pildes, 'How Behavioral Economics Trims Its Sails and Why' 127 *Harvard Law Review* 1593, 1595 (2014): 'Behavioral law and economics (BLE) has been broadly regarded in recent years as among the most promising and exciting new developments in public policymaking theory and practice.'

3 For monographic treatments of the topic in the EU, see, eg, K. Mathis (ed), *European Perspectives on Behavioural Law and Economics* (Cham: Springer, 2015); A. Alemanno and A.-L. Sibony (eds), *Nudge and the Law. A European Perspective* (Oxford: Hart, 2015); K.U. Schmolke, *Grenzen der Selbstbindung im Privatrecht [Limits of Binding Agreements in Private Law]* (Tübingen: Mohr Siebeck, 2014); S. Bechtold, *Die Grenzen zwingenden Vertragsrechts [Limits of Mandatory Contract Law]* (Tübingen: Mohr Siebeck, 2010); P. Hacker, *Verhaltensökonomik und Normativität [Behavioral Economics and Normativity]* (forthcoming 2016); L. Klöhn, *Kapitalmarkt, Spekulation und Behavioral Finance [Capital Markets, Speculation and Behavioral Finance]* (Berlin: Duncker & Humblot, 2006); C. Engel, M. Englerth, J. Lüdemann and I. Spiecker called Döhmann (eds), *Recht und Verhalten. Beiträge zu Behavioral Law and Economics [Law and Behavior. Contributions to Behavioral Law and Economics]* (Tübingen: Mohr Siebeck, 2007); countless papers by European academics could be added, see, eg, B. Luppi and F. Parisi, 'Beyond Liability: Correcting Optimism Bias Through Tort Law' 35 *Queen's Law Journal* 47–66 (2009); L. Klöhn, 'Preventing Excessive Retail Investor Trading under MiFID: A Behavioral Law and Economics Perspective' 10 *European Business Organization Law Review* 437 (2009); M.G. Faure, 'Calabresi and Behavioural Tort Law and Economics' 1 *Erasmus Law Review* 75 (2008).

instances of lawmaking and adjudication. At the very least, I shall argue, it must inform our assessment of legal elements which may aptly be called legal concepts of human agency – ie, those elements of a legal order that, explicitly or implicitly, refer to the cognitive competences of individual actors.

This paper claims that a descriptive analysis of the degree of implementation of behavioral insights into the practice of the law reveals surprising and significant differences between legal concepts of human agency in the US and the EU. While in the US, courts and regulatory agencies are increasingly willing to integrate findings from behavioral sciences into their opinions, the very *inverse* trend seems to be operating in the EU: Adjudication, first and foremost by the CJEU, is based on an ever more rational model of human behavior, according to the descriptive analysis here undertaken. This double phenomenon shall be termed the 'behavioral divide'. Some exceptions to this general tendency can be found, yet they fail to invalidate the general tendency of the behavioral divide. This finding is all the more astonishing at a time when academic scholarship in the EU increasingly takes behavioral insights into account. Against this background, the paper traces the differential trajectory of behavioral law and economics in the US and the EU with respect to two distinctive questions:

1. *Descriptively*, what standards of rationality do courts and regulatory agencies apply in the US and the EU? The answer will focus on legal concepts of human agency in exemplary domains[4] in which adjudication is directly connected to legal concepts of human agency, with its different possible degrees of rationality.
2. In view of the heterogeneous court and agency decisions, which *normative* yardstick ought to govern legal concepts of human agency, particularly in relation to the concepts of consumer and user ?

In the descriptive part, the general hypothesis of a behavioral divide between the US and the EU will be tested on two paradigmatic examples in concrete legal fields: consumer concepts in consumer law, and the role of user expectations and product warnings in product liability. The analysis will proceed in two stages corresponding to the first and second question just raised. First, a descriptive analysis of cases scrutinizes the degree of rationality *de facto* underlying concepts of human agency in these domains. From a comparative perspective, evidence from both the US and the EU will be considered. As a diachronic analysis will show, however, *inverse* trends seem to be operating in those two jurisdictions:

4 The two primary domains reviewed here are consumer concepts in consumer protection law and user concepts in product liability cases; furthermore, disclosure rules are touched upon.

While in the US a growing tendency to integrate bounded rationality both into the adjudication of cases and into policy analysis can be observed, the EU seems quite firmly and with few exceptions set on a course towards an ever more rational concept of human behavior.

Second, from a normative standpoint, a pluralistic model of human agency, developed in detail in a companion article,[5] will be applied to the exemplary cases. It assumes the simultaneous presence of boundedly as well as fully rational actors, thus providing a critical perspective on concepts used both in the US and the EU. This allows for a normative evaluation and a refinement of the differing trends and doctrinal categories in those two prominent legal spheres. In the field of consumer law, the framework urges the revision of the reasonable consumer paradigm in favor of a more boundedly rational, yet pluralistic, consumer concept. In relation to product liability, it suggests the adherence to a more boundedly rational user concept. Importantly, this implies that product warnings cannot shield manufacturers from liability. Nonetheless, boundedly rational behavior may potentially lead to a finding of contributory negligence.

The differential implementation of behavioral insights in the US and the EU raises a couple of further, important questions: First and foremost, what are the historical, economic, and political reasons for the behavioral divide? Second, what do the descriptive findings and the normative claims imply for theories of autonomy and paternalism? These intricate issues, however, transcend the scope of this article; they are the subject of separate papers by the author.[6]

This paper, in turn, proceeds as follows: Part II explores the implications of behavioral economics for legal concepts of human agency, both in general (II A) and in the particular domains of consumer concepts in consumer law (II B) and of user expectations and product warnings in product liability (II C). A comparative perspective, drawing on cases from both the US and the EU, will be adopted. Part III concludes.

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5 P. Hacker, Overcoming the Knowledge Problem in Behavioral Law and Economics – Bounded Rationality, Decision Theory, and Maximin Analysis, Journal of Law, Technology and Public Policy (forthcoming).

6 On the historical, economic, and political reasons for the behavioral divide, see P. Hacker, *More Behavioral vs. More Economic Approach: Explaining the Behavioral Divide between the US and the EU* (Humboldt Private Law Working Paper No 2015–07, May 2015) (on file with author); on autonomy theory and paternalism, see P. Hacker, *Nudging and Autonomy* (Humboldt Private Law Working Paper No 2015–05, February 2015) (on file with author); P. Hacker, 'Rethinking Autonomy', in H.-W. Micklitz, K. Purnhagen and A.-L. Sibony (eds), *Consumer Research Handbook* (forthcoming 2016); Hacker, *supra* n 3, under 'Paternalismus'.

II Behavioral Economics and Legal Concepts of Human Agency

Behavioral Economics has empirically established four main descriptive features of human decision making in the last decades: bounded rationality, bounded willpower, bounded self-interest, and cognitive capacity limits.[7] The first phenomenon refers to the abundant literature on heuristics and biases;[8] its most prominent theorization is found in Kahneman and Tversky's Prospect Theory.[9] The second component denotes effects such as the present bias and (quasi-)hyperbolic discount functions, in other words, the tendency to prefer immediate gratification over long-term maximization of utility.[10] Research on the third concept empirically underscores the intuition that decisions, even in economic contexts, are not always based on narrow self-interest.[11] And the fourth term brings to the fore *general* limits on the amounts of information that can be simultaneously processed[12] and

7 The distinction between bounded rationality, bounded willpower and bounded self-interest was established by R. Thaler, 'Doing Economics Without Homo Economicus', in S.G. Medema and W.J. Samuels (eds), *Foundations of Research in Economics: How Do Economists Do Economics?* (Cheltenham: Elgar, 1996) 227 and taken up, eg, by Jolls, Sunstein and Thaler, *supra* n 1, 1476; cognitive capacity limits are often studied in cognitive psychology rather than in economics, see *infra* n 12-13 and accompanying text. Nevertheless, they form an integral part of the behavioral understanding of decision making.

8 For a comprehensive overview of the heuristics and biases literature, see T. Gilovich, D. Griffin and D. Kahneman (eds), *Heuristics and Biases: The Psychology of Intuitive Judgment* (Cambridge: Cambridge University Press, 2002); C.E. Camerer, G. Loewenstein and M. Rabin (eds), *Advances in Behavioral Economics* (New York: Princeton University Press, 2003); M. Altman (ed), *Handbook of Contemporary Behavioral Economics* (Armonk: Sharpe, 2006).

9 D. Kahneman and A. Tversky, 'Prospect Theory: An Analysis of Decision under Risk' 47 *Econometrica*263 (1979);A. Tversky and D. Kahneman, 'Advances in Prospect Theory: Cumulative Representation of Uncertainty' 5 *The Journal of Risk and Uncertainty* 297 (1992).

10 See, eg, D. Laibson, 'Golden Eggs and Hyperbolic Discounting' 112 *Quarterly Journal of Economics* 443 (1997) (developing what has come to be called the β-δ-model of quasi-hyperbolic discount functions which attempts to explain time-inconsistent choices, with β measuring the extent of present bias).

11 W. Güth, R. Schmittberger and B. Schwarze, 'An Experimental Analysis of Ultimatum Bargaining' 3 *Journal of Economic Behavior and Organization* 367 (1982); for an overview, see E. Fehr and S. Gächter, 'Fairness and Retaliation: The Economics of Reciprocity' 14 *Journal of Economic Perspectives* 159 (2000).

12 The *locus classicus* is G.A. Miller, 'The Magical Number Seven, Plus or Minus Two: Some Limits on Our Capacity For Processing Information' 63 *Psychological Review* 81 (1956);see also R.S. Owen, 'Clarifying the Simple Assumption of the Information Load Paradigm' 19 *Advances in Consumer Research* 770, 773 (1992) (noting that evidence supports Miller's magical number 'as a rough benchmark'); see also N. Cowan, 'The magical number 4 in short-term memory: A reconsideration

attended to.[13] Cognitive capacity limits imply that even if we could process all information in a fully rational way, there are absolute limits as to *how much* information can enter working memory at any one moment.[14]

However, as critics of behavioral law and economics increasingly claim, these phenomena are not as stable and systematic as their proponents portray them.[15] This critique strikes behavioral law and economics at its weakest spot, as it is mounted from within the framework of its very own methodology.[16] As every empirical researcher knows, empirical findings, on which behavioral law and economics is built, are highly context-sensitive and difficult to generalize.[17] Under closer scrutiny, a considerable degree of uncertainty about the presence or absence of behavioral biases and effects in real life situations thus emerges.[18]

In such a situation of empirical uncertainty, the following question arises: What degree of rationality should the law be based on by default? On this normative level, this paper claims that in the face of empirical uncertainty about the existence, direction and intensity of biases, legal concepts of human agency must necessarily be pluralistic. They ought to assume the simultaneous presence of fully and boundedly rational actors. This conclusion can be corroborated by a rigorous decision theoretic analysis under risk and uncertainty that the author presents in a companion article.[19]

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of mental storage capacity' 24 *Behavioral and Brain Sciences* 87 (2000); A. Baddeley, 'Working Memory: Theories, Models, and Controversies' 63 *Annual Review of Psychology* 1, 15 (2012).

13 A good overview of limited attention can be found in C. Chabris and D. Simons, *the invisible Gorilla* (London: Harper, 2010).

14 On the concept of working memory, see the pioneering work of Alan Baddeley described in Baddeley, *supra* n 12.

15 Most recently A. Schwartz, 'Regulating for Rationality', *Stanford Law Review* (forthcoming 2015), http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2520017; see also M.J. Rizzo and D.G. Whitman, 'The Knowledge Problem of New Paternalism' *New York University Law Review* 905 (2009); G. Klass and K. Zeiler, 'Against Endowment Theory: Experimental Economics and Legal Scholarship' 61 *UCLA Law Review* 2, 61 (2013); R.A. Posner, 'Rational Choice, Behavioral Economics, and the Law' 50 *Stanford Law Review* 1551, 1570 (1998); J.D. Wright and D.H. Ginsburg, 'Behavioral Law and Economics: Its Origins, Fatal Flaws, and Implications for Liberty' 106 *Northwestern University Law Review* 1039, 1045–1046 (2012).

16 See Hacker, *supra* n 5.

17 See, eg, L.B. Nielsen, 'The Need for Multi-Method Approaches', in P. Cane and H.M. Critzer (eds), *The Oxford Handbook of Empirical Legal Research* (New York: Oxford University Press, 2010) 952, 955; K. Zeiler, 'Cautions on the Use of Economics Experiments in Law' 166 *Journal of Institutional and Theoretical Economics* 178 (2000).

18 See also A. Tor, 'Some Challenges Facing a Behaviorally-Informed Approach to the Directive on Unfair Commercial Practices', in T. Tóth (ed), *Unfair Commercial Practices* (Budapest: Pázmány Press, 2013) 9, 16–17.

19 See Hacker, *supra* n 5.

A The General Normative Framework

The normative baseline for legal concepts of human agency thus ought to be pluralistic, acknowledging the presence both of fully and boundedly rational actors. It should be noted that the insistence on the presence of boundedly rational actors does not necessarily lead to overprotective overreactions, but rather sharpens the focus of the debate by facilitating transparent trade-offs between the respective interests of the parties involved.[20] The possible consequences for boundedly rational actors are one important factor. It is crucial to note, however, that the interest of the boundedly rational agent will have to be balanced against other factors, especially against the interests of rational actors and of those who bear the costs of the protective legal measures. Thus, the pluralistic concept of human agency ensures a rational treatment of the question of bounded rationality.

As will presently be shown using a number of examples from consumer law, unfair competition law and product liability, the recognition of boundedly rational behavior therefore makes such previously implicit trade-offs explicit. Courts and agencies will, even under a stronger standard of rationality, often acknowledge that not all actors have reasonable expectations or act prudently.[21] However, for reasons rarely openly disclosed, they habitually choose to focus exclusively on those agents conforming to standards of reasonableness and stronger rationality. Grounding legal standards in a pluralistic model encompassing bounded rationality offers a more transparent method that makes trade-offs more precise, more explicit, and more flexible. It allows us to simultaneously take into account possible effects both on those who do and on those who do not suffer from bounded rationality. This is not true for the rival approach based on stronger rationality. Under that assumption, bounded rationality is simply neglected. On the contrary, the proposed framework resting on partial bounded rationality is not only more transparent and explicit but also more inclusive. It therefore bears a clear methodological and instrumental value.

To illustrate the differences and advantages of this type of legal analysis, a number of examples will be considered presently. The list is far from exhaustive. Nonetheless, it aims to capture two areas of law that are particularly indebted to models of human agency in the daily application of rules and statutes: consumer

20 On the importance of such trade-offs in behavioral analysis of law, see Tor, *supra* n 18, 17–18.

21 See, eg, *In re Kirchner*, 63 F T C 1282, 1290 (1963); FTC Policy Statement on Deception, 'Letter from James C. Miller III, Chairman of the FTC, to Rep John D. Dingell, Chairman of the Commission on Energy & Commerce of the House of Representatives (14 October 1983)', available at http://www.ftc.gov/bcp/policystmt/ad-decept.htm [hereinafter Deception Statement], III.

concepts, as used in false advertisement as well as foodstuff regulations; and product liability, especially at the intersection of design defects, consumer expectations and product warnings. In all instances, the underlying concepts of human agency will first be distilled from a descriptive analysis of decisions by courts and regulatory agencies. In doing this, it will be helpful to contrast approaches in the US with those in the EU. The descriptive analysis will reveal an astonishing 'behavioral divide' between concepts used in those legal regimes. In a second step, a normative analysis guided by the theoretical framework just established will be undertaken to resolve the tensions revealed in the positive analysis by means of transparent trade-offs.

B Consumer Concepts

1 Consumer Concepts Today: A Brief Descriptive Survey

The connection between consumer concepts and rationality standards is probably best perceived when looking at the definition of deceptive trade practices. Since the creation of statutes banning such acts, courts have grappled, both in the US and in the EU, with the issue of which consumers ought to be protected by the provision: only the reasonable ones acting with a greater degree of rationality, or those departing from such strict standards and thus more easily deceived? The overview will be complemented by some short remarks on the role of disclosures in consumer law.

a) US: Three Stages

The Federal Trade Commission Act,[22] as amended by the Wheeler-Lea Act in 1938,[23] gives the US Federal Trade Commission (FTC) sweeping authority to prohibit unfair or deceptive trade acts.[24] Consumer concepts relating to a theory of rational human agency broadly influence what is understood to be a deceptive act.

Regarding the development of consumer concepts in the context of deceptive trade acts, three stages can be discerned. In a first phase, from the 1940s on, it

22 15 U S C §§ 41–58 (2000).

23 Wheeler-Lea Act of 1938, Pub L No 75–447, § 3, 52 Stat 111, 111 (1938) (codified as amended at 15 U S C § 45(a) (2000)).

24 V.E. Schwartz and C. Silverman, 'Common-Sense Construction of Consumer Protection Acts' 54 *The University of Kansas Law Review* 1, 8 (2005).

was sufficient for the FTC to show that a trade practice reveals a tendency or capacity to deceive *any* substantial portion of the general public.[25] This reference group comprised 'that vast multitude which includes the ignorant, the unthinking, and the credulous, who, in making purchases, do not stop to analyze but too often are governed by appearances and general impressions.'[26] In other words, the standard was geared not towards a rational machine but towards a cognitively limited creature. The test therefore boiled down to whether a substantial number of consumers, regardless of their cognitive endowments and attention deficits, were deceived.[27] The aim of this demarche was, as the Second Circuit Court of Appeals expressed it in the words of Biblical prophet Isaiah, to ensure that 'wayfaring men, though fools, shall not err [...].'[28]

As prophetic language came to be displaced by economic thinking under the auspices of the Chicago School, the standard for measuring deceptive practices was all but reversed.[29] Not the fool, rather merely the *reasonable* person was to be henceforth protected. The standard of the 'reasonable consumer' was introduced.[30] In a policy statement on deception issued in 1983,[31] the chairman of the FTC summarized and further explained his view on the requisite cognitive mindset the FTC should attribute to consumers when evaluating deceptive practices. The letter holds that a deceptive practice 'must be likely to mislead reasonable consumers under the circumstances.'[32] While reasonableness allows for taking into account the target group of the relevant practice,[33] generally this second stage was marked by a move toward a consumer concept couched to a greater extent in terms of standard economic rationality. As the policy statement has it, misconceptions 'among the foolish and feeble-minded'[34] would not be accommo-

25 *Charles of the Ritz Distributors Corp* v *FTC*, 143 F 2d 676, 679 (2nd Cir 1944) ('The important criterion is the net impression which the advertisement is likely to make upon the general populace.'); *Exposition Press, Inc* v *FTC*, 295 F 2d 869, 872 (2nd Cir 1961); *FTC* v *Colgate-Palmolive Co*, 380 U S 374, 390–392 (1965); see also Schwartz and Silverman, *supra* n 24.

26 R. Callmann, *Unfair Competition and Trade-marks* (2nd ed, Chicago: Callaghan, 1950) 341 (citations omitted); quoted in *FTC* v *Sterling Drug, Inc*, 317 F 2d 669, 674 (2nd Cir 1963); see also *Charles of the Ritz Distributors Corp* v *FTC*, 143 F 2d 676, 679 (2nd Cir 1944).

27 *Cliffdale Associates, Inc*, 106 F T C 110, 162, 164 (1984).

28 *Charles of the Ritz Distributors Corp* v *FTC*, 143 F 2d 676, 680 (2nd Cir 1944).

29 See B. Beebe *et al, Trademarks, Unfair Competition, and Business Torts* (New York: Wolters Kluwer Law & Business, 2011) 375.

30 Schwartz and Silverman, *supra* n 24, 10.

31 Deception Statement, *supra* n 21.

32 Deception Statement, *supra* n 21, III.

33 Deception Statement, *supra* n 21, III; see also Schwartz and Silverman, *supra* n 24, 10–11.

34 Deception Statement, *supra* n 21, III, citing *In re Kirchner*, 63 F T C 1282, 1290 (1963).

dated. This implies a stronger standard of rationality in which the relevant agents are expected not to make cognitive mistakes, to weigh the evidence in a statistically correct way, to refrain from emotional or off-the-cuff reactions and to be attentive and capable to correctly process semantic signals.[35] '[I]gnorance or incomprehension'[36] are not considered valid grounds for qualifying a practice as deceptive. It follows that members of the population exhibiting such traits may be safely excluded from the analysis. In the matter of *Cliffdale Associates, Inc*, the case in which the majority of the commission adopted the new standard proposed by the policy statement, the dissenting commissioner Pertschuk keenly noted that the effect of the new method is 'to withdraw the protection of Section 5 [of the FTCA] from consumers who do not act "reasonably".'[37] Nonetheless, in the years following *Cliffdale*, the reasonable consumer standard was widely adopted by both federal[38] and state courts in the US.[39]

The parable of the reasonable consumer is mirrored in a key consumer protection technique invented in the US in the 1930s[40] and expanded in the second half of the 20th century into virtually all other areas of law: the disclosure paradigm.[41] The rationale behind it is that the best form of regulation consists in the provision of mandatory information to imperfectly informed market actors.[42]

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35 This is not to say that the reasonable consumer standard supposes that relevant consumers do process *all* the given information perfectly: '[T]he Commission recognizes that in many circumstances, reasonable consumers do not read the entirety of an ad or are directed away from the importance of the qualifying phrase by the acts or statements of the seller.' (Deception Statement, *supra* n 21, III) However, it does imply that consumers are supposed to draw the right and plausible inferences from those parts of a statement a consumer can be reasonably expected to pay attention to, such as the headline of an advertisement or the name of a product.

36 Deception Statement, *supra* n 21, III, citing *In re Kirchner*, 63 F T C 1282, 1290 (1963).

37 *Cliffdale Associates, Inc*, 106 F T C 110, 161 (1984).

38 *Southwest Sunsites, Inc* v *FTC*, 785 F 2d 1431, 1436 (9th Cir 1986); *Kraft, Inc* v *FTC*, 970 F 2d 311, 313 (7th Cir 1992); *FTC* v *Patron I Corp*, 33 F 3d 1088, 1095 (9th Cir 1994) (adopting generally the standard of Cliffdale Associates but not deciding specifically between reasonable customer and substantial numbers test, see n 21 of the opinion); *FTC* v *Gill*, 265 F 3d 944, 950 (9th Cir 2001); *FTC* v *LoanPointe, LLC*, 525 Fed Appx 696, 700 (10th Cir 2013); see also Schwartz and Silverman, *supra* n 24, 10; Beebe *et al, supra* n 29, 376.

39 *Aspinall* v *Philip Morris Companies, Inc*, 442 Mass 381, 397 (2004).

40 See for an early plea L.D. Brandeis, *Other People's Money: and How the Bankers Use It* (New York: Stokes, 1914) 92 *et seq*; on the subsequent implementation in the incipient securities regulation of 1944/34, see L. Loss, J. Seligman and T. Paredes, *Fundamentals of Securities Regulation* (6th ed, New York: Wolters Kluwer, 2011) chapter 1, C and D.

41 On its spread, and a thorough critique of this development, see O. Ben-Shahar and C.E. Schneider, *More Than You Wanted to Know* (Princeton: Princeton University Press, 2014).

42 See, eg, D.M. Grether, A. Schwartz and L.L. Wilde, 'The Irrelevance of Information Overload: An Analysis of Search and Disclosure' 59 *Southern California Law Review* 277 (1986).

This has led to a proliferation of prospectuses, brochures, and information leaflets which are omnipresent add-ons in every legal transaction in the US.[43] Disclosures are necessarily premised on the general belief that the relevant addressed parties will take heed of, read, and understand the information provided. They rest, therefore, on a strong version of human and consumer rationality.

However, the tide is slowly turning in the field of disclosure. Regulatory agencies in the US are increasingly aware of the deficiencies of traditional disclosure and the conflicts of its premises with behavioral research.[44] The Consumer Financial Protection Bureau (CFPB) recently created by the Dodd-Frank Act, for example, has just redesigned the disclosures for a major part of the consumer mortgage credit market (TILA-RESPA disclosures).[45] The revision was preceded by a massive round of empirical testing of different formats in order to produce disclosures which will stand the best chance of being read and understood by consumers.[46] The study follows up on a survey by the FTC conducted in 2007 aimed at enhancing the readability and understandability of disclosures.[47] Currently, a similar project is underway at the CFPB to reform disclosures for prepaid payment card contracts.[48] Privacy disclosures have been equally standardized and cognitively optimized,[49] and ATM disclosures revised.[50] Scholars have been calling for 'smart', ie, cognitively optimized, disclo-

43 The integration of the disclosure paradigm into consumer law was spurred by significant academic contributions, such as H. Beales, R. Craswell and S.C. Salop, 'The Efficient Regulation of Consumer Information' 24 *Journal of Law and Economics* 491 (1981).

44 See, eg, J.D. Wright, 'The Antitrust/Consumer Protection Paradox: Two Policies at War with Each Other' 121 *Yale Law Journal* 2216, 2230–2233 (2012).

45 See http://www.consumerfinance.gov/regulatory-implementation/tila-respa/.

46 Consumer Financial Protection Bureau and Kleimann Communication Group, Inc, 'Know Before You Owe. Evolution of the Integrated TILA-RESPA Disclosures' (2012), available at http://files.consumerfinance.gov/f/201207_cfpb_report_tila-respa-testing.pdf.

47 Federal Trade Commission, Bureau of Economics, 'Staff Report: Improving Consumer Mortgage Disclosures. An Empirical Assessment of Current and Prototype Disclosure Forms' (June 2007), available at https://www.ftc.gov/sites/default/files/documents/reports/improving-consumer-mortgage-disclosures-empirical-assessment-current-and-prototype-disclosure-forms/p025505mortgagedisclosurereport.pdf.

48 http://www.consumerfinance.gov/blog/prepaid-products-new-disclosures-to-help-you-compare-options/; the sample model disclosure form can be found at http://files.consumerfinance.gov/f/201411_cfpb_prepaid-model-sample-disclosure-forms.pdf; the proposed regulation is available at http://files.consumerfinance.gov/f/201411_cfpb_regulations_prepaid-nprm_proposed-rule.pdf.

49 http://files.consumerfinance.gov/f/201410_cfpb_final-rule_annual-privacy-notice.pdf.

50 https://www.federalregister.gov/articles/2013/03/26/2013-06861/disclosures-at-automated-teller-machines-regulation-e.

sure for some years.[51] US agencies are now, not yet in all areas, but in an increasing manner, heeding these calls.[52] This goes hand in hand with an explicit acknowledgement, and performance, of behavioral analyses.[53]

Thus the advent of behavioral law and economics has inaugurated, as this paper claims, a new and third stage in the shaping of consumer concepts in the US in the context of *regulatory agencies*. Driven by insights gained from empirical studies, scholars and regulators have realized that those 'foolish and feeble-minded' excluded by the reasonable consumer standard may be a much more pervasive species than one had previously thought. In some cases they may even represent the majority of customers. After the meltdown of the financial crisis, newly founded regulatory agencies and bodies, such as the CFPB and a 'US Behavioral Insights Team' at the White House,[54] are now actively promoting consumer protection predicated on a concept of bounded rationality.[55]

While the behavioral approach is already shaping the US policy agenda in a remarkable way, I will argue that the application of the principles relating to the acknowledgment of bounded rationality call for a critical revision of the reasonable consumer standard as employed by US *courts*, as well. First, however, the parallel development of consumer standards in the EU will be briefly reviewed.

b) EU: Two Stages, and a Half

The development of consumer concepts in the EU can be divided into two stages, which track remarkably well the parallel evolution of consumer concepts in the US. The process in Germany is representative of the tendency in the wider

51 See, eg, M.S. Barr, S. Mullainathan and E. Shafir, 'Behaviorally Informed Financial Services Regulation', Asset Building Program Policy Paper, New America Foundation, (2008), available at http://repository.law.umich.edu/other/29/; R.H. Thaler and W. Tucker, 'Smarter Information, Smarter Consumers' *Harvard Business Review* 44 (January–February 2013).

52 See C.R. Sunstein, 'Informing Consumers through Smart Disclosure, Memorandum for the Heads of Executive Departments and Agencies', available at https://www.whitehouse.gov/sites/default/files/omb/inforeg/for-agencies/informing-consumers-through-smart-disclosure.pdf.

53 The issue of disclosure cannot be pursued in depth here; for a substantial exposition of a behavioral theory of disclosure, see *supra* n 51; O. Bar-Gill, *Seduction by Contract* (Oxford: Oxford University Press, 2012); Hacker, *supra* n 3.

54 See The US Goverment (Unknown Source), 'Research to Results: Strengthening Federal Capacity for Behavioral Insights' (2013), obtained by Fox News: http://www.foxnews.com/politics/interactive/2013/07/30/behavioral-insights-team-document/; see also Y. Feldman and O. Lobel, 'Behavioral Tradeoffs: Beyond the Land of Nudges Spans the World of Law and Psychology', in Alemanno and Sibony (eds), *supra* n 3, 301.

55 Wright, *supra* n 44, 2220–2224.

EU.[56] Since the middle of the 20th century, the consumer concept in Germany endorsed a low standard of rationality. The consumer was assumed to be poorly informed, inattentive and credulous.[57] On the European level, the CJEU, however, started to operate from distinctly different premises: those of a mature consumer adhering to a stronger standard of rationality.[58] The European model consumer thus has come to be the average consumer who is reasonably well informed, reasonably observant and circumspect.[59] The German High Court, under the influence of the rulings of the CJEU, in 1999 reversed its consumer concept to align it with the European model.[60]

One has to concede that consumer concepts in the EU are not entirely monolithic, either. Lawmakers in drafting directives and regulations for specific areas do extend protection to more casual consumers.[61] The CJEU does take reduced attention and cognitive capabilities into account when much is at stake, such as in issues concerning serious health risks.[62] Some sparse references to 'vulnerable' consumers can also be unveiled in some EU directives.[63] Outside of these rare excepted areas, however, the general concept nowadays in the EU, and particularly in the rulings of the CJEU, is that of the reasonably well informed, reasonably observant and circumspect average consumer.[64]

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56 See H.-W. Micklitz, 'The Expulsion of the Concept of Protection from the Consumer Law and the Return of Social Elements in the Civil Law: A Bittersweet Polemic' 35 *Journal of Consumer Policy* 283 (2012); for a broader assessment including other Member States, see, eg, J. Stuyck, 'European Consumer Law after the Treaty of Amsterdam: Consumer Policy in or beyond the Internal Market', 37 *Common Market Law Review* 367 (2000).

57 V. Reichardt, *Der Verbraucher und seine variable Rolle im Wirtschaftsverkehr [The consumer and its Variable Role in Economic Transactions]* (Berlin: Duncker & Humblot, 2008) 158.

58 Already apparent in ECJ case 120/78 *Cassis de Dijon* [1979] ECR 649, paragraph 13; more on this case *infra*, part II B 2 b) (2).

59 ECJ case 210/96 *Gut Springenheide* [1998] ECR I-4657, paragraph 31; ECJ case 303/97 *Kessler Hochgewächs* [1999] ECR I-513, paragraph 36; ECJ case 220/98 *Estée Lauder Cosmetics* [2000] ECR I-117, paragraph 27.

60 Bundesgerichtshof [Federal High Court], 10 October 1999, *Neue Juristische Wochenschrift – Rechtsprechungsreport* 1490, 2000; Reichardt, *supra* n 57, 160.

61 A. Meisterernst, 'A New Benchmark for Misleading Advertisement' 2 *European Food and Feed Law Review* 91 (2013).

62 ECJ case 220/98 *Estée Lauder Cosmetics* [2000] ECR I-117, paragraph 28; ECJ case 99/01 *Linhart and Biffl* [2002] ECR I-9375, paragraphs 31, 35; see also S. Grundmann, 'European Contract Law(s) of What Colour' 2 *European Review of Contract Law* 184, 200 (2005).

63 L. Waddington, 'Vulnerable and Confused: The Protection of "Vulnerable" Consumers under EU Law' 38 *European Law Review* 757 (2013).

64 S. Weatherill, *EU Consumer Law and Policy* (Cheltenham: Elgar, 2005) 58; Reichardt, *supra* n 57, 156–157.

Again, it may be noted that this image of a consumer[65] fits perfectly well with the disclosure paradigm which has spread from the US to the EU in recent decades.[66] One could argue that disclosure was fully inaugurated as a pillar of EU law by the Cassis de Dijon ruling of the CJEU, which will be discussed in full detail below.[67] EU law, and particularly private law, has become awash with mandatory disclosures in the last decades. Suffice to mention the Consumer Rights Directive of 2011, which in its Article 5 provides for no less than 8 groups of items which have to be disclosed even in the most ordinary consumer contracts.[68] Other than in the US, however, smart, behaviorally-informed disclosure has not yet gained much traction in EU regulatory agencies or legislation.

Nonetheless, there are some exceptions to be noted. A few progressive government agencies as well as the European Commission are now starting to revise their legal concepts of human agency under the pressure of the behavioral literature. Thus, behavioral analysis has made its way into some areas of law in the EU, both on the European and the national level. The European Commission very recently sponsored a study which concluded that behavioral sciences should play a greater role in EU policy making.[69] The Directorate-General for Health and Consumers (DG SANCO) now conducts concrete case studies to assess the impact of consumer protection regulation.[70] And in its role as the antitrust enforcement agency, the Commission lately made use of behavioral

65 On consumer images in the EU, see now D. Leczykiewicz and S. Weatherill (eds), *The Image(s) of the 'Consumer' in EU Law: Legislation, Free Movement and Competition Law* (forthcoming 2015).

66 See, eg, S. Grundmann, W. Kerber and S. Weatherill (eds), *Party Autonomy and the Role of Information in the Internal Market* (Berlin: De Gruyter,2001); H. Merkt, *Das Informationsmodell im Gesellschafts- und Kapitalmarktrecht [The Disclosure Paradigm in Company Law and Securities Regulation]*, zfbf Sonderheft 55/06, 24–60, 2006.

67 See *infra*, part II B 2 b) (2) (a).

68 Directive 2011/83/EU of the European Parliament and of the Council of 25 October 2011 on consumer rights, *OJ* L 304, 22 November 2011, 64; art 6 provides for an even much greater number of groups of items which need to be disclosed in the case of a long-distance contract.

69 R. van Bavel, B. Herrmann, G. Esposito and A. Proestakis, 'European Commission, Applying Behavioural Sciences to EU Policy-making' JCR Scientific & Policy Reports, EUR 26033 EN 3 (2013).

70 See the information provided on the DG SANCO's website, at http://ec.europa.eu/consumers/consumer_evidence/behavioural_research/index_en.htm; see also Commission, 'Guidance on the Implementation/Application of Directive 2005/29/EC on Unfair Commercial Practices' Commission Staff Working Document, SEC(2009) 1666 http://ec.europa.eu/justice/consumer-marketing/files/ucp_guidance_en.pdf, 32 (sec 4.2.4); Commission & Decision Technology Ltd, 'Consumer Decision-Making in Retail Investment Services: A Behavioural Economics Perspective', Final Report (November 2010), http://ec.europa.eu/consumers/archive/strategy/docs/final_report_en.pdf; see further A.-L. Sibony, 'Can EU Consumer Law Benefit from Behavioural Insights? An Analysis of the Unfair Practices Directive' 22 *European Review of Private Law* 901, 905–906 (2014).

economics in its decisions against Microsoft to establish an abuse of a dominant position (in § 2 Sherman Act parlance: monopolizing).[71] Behavioral studies of search behavior by search engine users will also be part of the current antitrust proceedings against Google.[72] The General Court condoned the Commission's behavioral analysis in the Microsoft cases (without reference, however, to the behavioral analysis).[73] Antitrust law, however, has by its very nature always been closer to modern economic approaches.[74] Apart from some beginnings in this field, and the fledgling consumer research at DG SANCO, a behavioral approach comparable to the one in the US is lacking on the EU level.

Some Member States of the EU, however, display a more progressive attitude, first and foremost the UK. Not only did Prime Minister David Cameron famously set up the UK Cabinet Office Behavioural Insights Team, which is supposed to institutionalize nudging concepts in governmental work.[75] Less noticed, but perhaps most notably, the UK Financial Conduct Authority (FCA) now reunites competences in the field of antitrust and securities regulation as well as in consumer law – a striking parallel to the US CFPB. The FCA has taken up behavioral economics in its daily work,[76] and even conducts its own empirical studies.[77] However, the UK is in this respect rather the exception than the rule

71 *Microsoft*, COMP/C-3/37.792 232 recital 870 (2004); *Microsoft (Tying)*, COMP/C-3/39.530 10–12 (2009).

72 Cf J. Almunia, 'Statement on the Google investigation' (5 February 2014), available at http://europa.eu/rapid/press-release_SPEECH-14-93_en.htm.

73 Gen Ct case T-201/04 *Microsoft* [2007] ECR II-3601.

74 I. Lianos and C. Genakos, 'Econometric Evidence in EU competition law: an empirical and theoretical analysis', in I.Lianos and D. Geradin (eds), *Handbook on European Competition Law: Enforcement and Procedure* (Cheltenham: Elgar, 2013) 1.

75 K. Bennhold, 'Britain's Ministry of Nudges', New York Times (7 December 2011); among their relevant publications are 'Department for Business Innovation & Skills & Behavioural Insights Team, Better Choices: Better Deals. Consumers Powering Growth' (2011), available at http://www.datagovernor.co.uk/styled-4/downloads/files/better-choices-better-deals.pdf; 'Behavioural Insights Team, Applying behavioural insights to reduce fraud, error and debt' (2012), available at https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/60539/BIT_FraudErrorDebt_accessible.pdf.

76 Financial conduct Authority, 'Applying behavioural economics at the Financial conduct Authority', Occasional Paper No 1 (2013), available at http://www.fca.org.uk/static/documents/occasional-papers/occasional-paper-1.pdf.

77 Financial conduct Authority, 'How does selling insurance as an add-on affect consumer decisions? A practical application of behavioural experiments in financial regulation', Occasional Paper No 3 (2014), available at http://www.fca.org.uk/static/documents/occasional-papers/occasional-paper-3.pdf.

among Member States of the EU. Only a few Member States are currently launching a behavioral program: Germany has just created three positions in the Federal Chancellery to this purpose;[78] the Netherlands[79] and France[80] are slowly pursuing the paths of nudging. Government agencies of most other nations remain fairly untouched by a behavioral approach.

In summary, the behavioral perspective is, generally speaking, still in the minority among EU Member States. On the European level the Commission is experimenting with behavioral strategies. However, the Commission may only propose legislation, which is then – often massively – altered by the European Parliament and the European Council representing the Member States. Therefore, behavioral approaches by the Commission can be expected to be watered down significantly by the ensuing legislative process.[81] Moreover, the most important current legislative acts on the EU level, such as the recent Consumer Rights Directive, still adhere to a rational actor model.[82]

Where does this leave us with respect to consumer concepts in the EU? Only the UK pursues a clearly behaviorally founded consumer concept within the FCA and the Behavioural Insights Team. Both on the European and on the remaining Member States' level, the rational consumer model is still very much *en vogue*.

78 A. Neubacher, 'Alchemie im Kanzleramt', Der Spiegel, 1 September 2014, http://www.spiegel.de/spiegel/print/d-128977553.html.

79 The Netherlands Authority for Consumers and Markets, 'Behavioural Economics and Competition Policy', https://www.acm.nl/en/publications/publication/11610/ACM-publishes-study-into-behavioural-economics-and-competition-policy/ (June 2013); see also Scientific Council for Government Policy (WRR), 'Met kennis van gedrag beleid maken (Policymaking with Knowledge of Behavior)', http://www.wrr.nl/fileadmin/nl/publicaties/PDF-Rapporten/92_Met_kennis_van_gedrag_beleid_maken.pdf.

80 R. Bordenave, E. Singler, F. Waintrop and E. Bressoud, 'French Goverment: Nudge Me Tender', http://www.bva.fr/data/actualite/actualite_fiche/553/fichier_summary-nudge_me_tender-bva4f7be.pdf (2014); in Denmark, a bottom-up initiative has sprung up among academics, see http://inudgeyou.com/about/projects/; on their increasing integration into the Danish government, as well as the whole enterprise of nudging in Europe, see A. Alemanno and A.-L. Sibony, 'Epilogue: The Legitimacy and Practicability of EU Behavioral Policymaking', in Alemanno and Sibony (eds), *supra* n 3, 342.

81 This is what happened, for example, with the proposal of the Commission to introduce food 'signposts' on labels, see C. MacMaoláin, 'Regulating consumer information: use of food labelling and mandatory disclosures to encourage healthier lifestyles', in A. Alemanno and A. Garde (eds), *Regulating Lifestyle Risks* (Cambridge: Cambridge University Press, 2014) 46, 61–62.

82 See, eg, the endless lists of mandatory disclosure items in art 5–6 of the Directive 2011/83/EU of the European Parliament and of the Council of 25 October 2011 on consumer rights, 2011 *OJ* L 304/64; on the consumer concept inherent in this directive, see also V. Mak, 'Standards of Protection: In Search of the "Average Consumer" of EU Law in the Proposal for a Consumer Rights Directive' 19 *European Review of Private Law* 25 (2011).

While some scholars are actively debating the future of consumer concepts in Europe,[83] the CJEU still clings to its reasonable consumer concept. Behavioral law and economics has been less influential so far in shaping national and European policy proposals in the EU than it has been in the US. The third stage the US has entered is far from being reached in Europe. Considering the differential momentum in both legal spheres, the normative question sharply arises, for both the EU and the US: Do we need a more boundedly rational consumer concept?

2 Towards a Boundedly Rational Consumer Concept: Normative Implications

Taking bounded rationality into account first, however, gives rise to yet another problem. How can empirical insights about bounded rationality generally be integrated into consumer concepts? There are three distinct ways to answer this

83 A.-L. Sibony and G. Helleringer, 'EU Consumer Protection and Behavioural Sciences: Revolution or Reform?', in Alemanno and Sibony (eds), *supra* n 3, 214–219. II; Mak, *supra* n 82; N. Helberger, 'Forms Matter: Informing consumers effectively', Study commissioned by BEUC, 2013, http://www.beuc.eu/publications/x2013_089_upa_form_matters_september_2013.
pdf; R. Incardona and C. Poncibò, 'The average consumer, the unfair commercial practices directive, and the cognitive revolution' 30 *Journal of Consumer Policy* 21 (2007) (noting the differences between the average consumer concept employed by the CJEU and behavioral economics); C. MacMaoláin, 'Waiter! There Is a Beetle in My Soup. Yes Sir, That's E120: Disparities Between Actual Individual Behavior and Regulating Food Labelling for the Average Consumer in EU Law' 45 *Common Market Law Review* 1147, 1160 (2008) (doubting that the European average consumer standard fits well with observed consumer behavior); H. Unberath and A. Johnston, 'The Double-Headed Approach of the ECJ Concerning Consumer Protection' 44 *Common Market Law Review* 1237, 1250–1251 (2007) (noting that the average consumer standard may be at odds with cognitive limitations but that the possibilities of Member States to enact legislation taking account of this are limited in view of the CJEU rulings); S. Weatherill, 'Recent Case Law Concerning the Free Movement of Goods: Mapping the Frontiers of Market Deregulation' 36 *Common Market Law Review* 51, 56–58 (1999) (concluding that the average consumer standard sacrifices the vulnerable consumers' interests for those of the reasonable ones); Weatherill, *supra* n 64, 193; S. Grundmann, 'Targeted Consumer Protection', in Leczykiewicz and Weatherill, *supra* n 65 (arguing that legal norms should respond to specific, behaviorally informed subgroups of economic agents, not to concepts of consumers as such); J. Stuyck,'The Notion of the Empowered and Informed Consumer in Consumer Policy and How to Protect the Vulnerable under Such a Regime', in G. Howells, A. Nordhausen, D. Parry and C. Twigg-Flesner (eds), *Yearbook of Consumer Law 2007* (Aldershot: Ashgate, 2007) 167, 180–186 (discussing vulnerability); but see also L.W. Gormley, 'The Consumer Acquis and the Internal Market' 20 *European Business Law Review* 409, 413 (2009) (defending the average consumer standard); cf also Sibony, *supra* n 70, 909–910 (highlighting the tension between the EU concept and behavioral insights); Tor, *supra* n 18; cf in general Alemanno and Sibony (eds), *supra* n 3.

question. They correspond to three different types of consumer concepts: strictly normative, strictly empirical, and a mix of both.

a) Types of Consumer Concepts

A strictly normative model fixes the relevant characteristics consumers (ought to) possess in relation to some normatively founded theory of human agency. The European reasonable consumer concept as well as the older US model advocated by the FTC Deception Statement come close to this ideal type. The obvious problem related to this model is that it is barred from taking empirical findings into account and thus easily becomes detached from reality. Empiricism, however, helps to achieve the goals of the relevant norm and renders the debate more rational overall by allowing more transparent trade-offs. Therefore, whenever the protection of consumers is at stake, a strictly normative model won't do. It leads to factual miscalibrations and normative doctrinalism.

On the other end of the spectrum, we find the strictly empirical concept. Such a model does not take normative value judgments into account at all and strives to match the empirical findings to the greatest degree possible. It demands, however, what is not feasible: the development of a uniform and clear empirical model of human agency. As the brief discussion of behavioral economics showed,[84] a formulation of such a model is not available at the moment and most probably won't be attainable in the near future.[85] A strictly empirical model would be infinitely complex[86] and would have to be updated with every new relevant study published in the social sciences. Its inherent and notorious instability makes it inimical to the minimum degree of foreseeability and certainty that legal analysis requires. Future parties need to know roughly what to expect in the legal landscape. A strictly empirical model therefore is not tractable.

What is needed, therefore, is a model that combines a high degree of stability with a high degree of openness towards the empirical data relevant to the degree of protection afforded to the affected parties. I shall call this an empirically grounded normative model. It is a normative model whose level of rationality is guided, corrected and regularly updated by empirical findings. A key consequence of findings of behavioral economics, and of their limitations, is that the normative content of a consumer concept must not be uniquely shaped by a standard of reasonableness that matches rational behavior. Rather, the appropri-

84 See *supra*, beginning of part II, and Hacker, *supra* n 5.

85 See also Tor, *supra* n 18, 17.

86 See G. Mitchell, 'Why Law and Economics' Perfect Rationality Should not be Traded for Behavioral Law and Economics' Equal Incompetence' 91 *Georgetown Law Journal* 67, 104 (2002).

ate model in consumer protection cases is by default pluralistic. As both types of human agency – full and bounded rationality, with any shades of grey – are empirically observable, the empirically grounded normative model encompasses both a boundedly rational and a fully rational component. It holds that as a general matter, we have to take the interests of both boundedly rational *and* more fully rational consumers into account. It therefore posits as a default that both forms of behavior coexist and, as opposed to a strictly normative model, that both must be relevant to legal analysis. The ratio between both has to be informed by empirical studies and may be corrected by them over time as well. However, the rules for altering the default are more demanding than in the strictly empirical model.[87] The normative component entails that not every empirical oscillation – finding a little more bounded rationality here or some more standard market rationality there – should lead to a revision of the entire concept. Only if the effects are sufficiently large can they be brought to bear on the concept. Thus, it can be applied in a situation-specific way and remains open to major revisions of the rationality debate in the social sciences. The default, however, is fixed to a pluralistic coexistence of boundedly and fully rational behavior.

The empirically grounded normative model thus combines some of the virtues of the strict models while avoiding their vices. It guarantees a certain stability and legal certainty by virtue of its normative nature. On the other hand, it is informed by empirical findings and thus remains open to revision.

b) Transparent Trade-Offs

The greatest attraction of the empirically grounded normative model and its pluralistic framework, however, is that it sets the stage for tractable normative analysis, ie, for transparent trade-offs. The crucial question in each case then is the relative weight accorded to the interests of the boundedly rational and the fully rational consumers. This requires a normative analysis that spells out explicitly the evaluations underlying the balancing of interests of these different groups.

As the following examples will show, legal analysis in the field of consumer concepts until now has either turned a blind eye to phenomena of bounded rationality or functioned by means of hidden trade-offs between more and less rational consumers. Such hidden trade-offs often take place implicitly 'within' the consumer concept, which is normatively geared towards a very specific type of

87 On the importance of altering rules, see I. Ayres, 'Regulating Opt-Out: An Economic Theory of Altering Rules' 121 *Yale Law Journal* 2032 (2012).

person acting with a certain level of rationality deemed to be the one most worthy of protection.[88] Transparent trade-offs separate the process of normative weighting from the definition of the consumer concept and therefore make the procedure explicit. It is not tucked away in the inherent workings and characteristics of an opaque concept of consumer behavior. Two examples shall illustrate what we can gain from a more boundedly rational consumer concept: the cases of false advertisement and of foodstuff labeling.

(1) Example 1: False Advertisement

As expounded above, both the US and the EU operate with a reasonable consumer standard to determine whether an advertisement is false and deceptive (or misleading, in EU parlance[89]). This is epitomized by two hallmark cases which raise a number of parallel issues: the European 'Clinique' case[90] and the American 'Danish pastry' hypothetical used prominently in the FTC's 1983 deception statement.[91]

(a) Exemplary Cases: 'Clinique' and 'Danish Pastry'

In the European case, subsidiaries of the US company Estée Lauder marketed a cosmetic product under the name 'Clinique' (French for 'hospital' or 'clinical', very close to the German 'Klinik' for 'Hospital'). The product, however, did not have any positive medical properties. It had been sold and advertised under this name for years in France and in other countries of the EU and was introduced for the first time under this name in Germany in the early 90s. In Germany, a suit was brought seeking an injunction of the marketing of the product under the name 'Clinique'. The plaintiffs argued that the name could mislead consumers to believe that the product did possess medical properties. The defendants replied that if consumer protection law forced them to change the name of the product for marketing in Germany, this would unduly restrain interstate commerce in the EU. The CJEU in deciding the case held that 'the clinical or medical connotations of the word "Clinique" are not sufficient to make that word so misleading as to justify the prohibition of its use on products marketed in the aforesaid circum-

88 This implicit trade-off is until now favored by most scholars, see, eg, Reichardt, *supra* n 57, 156.

89 On the concept of misleading practices in EU law and its intersections with psychology, see Sibony, *supra* n 70, 922–926.

90 ECJ case 315/92 *Clinique* [1994] ECR I-317.

91 Deception Statement, *supra* n 21, III, citing *In re Kirchner*, 63 F T C 1282, 1290 (1963).

stances.'[92] In justifying this conclusion, the court apodictically stated that 'those products are ordinarily marketed in other countries under the name "Clinique" and the use of that name apparently does not mislead consumers.'[93] In assuming that 'apparently' the use of the name 'Clinique' does not mislead consumers, the CJEU is implicitly deeply indebted to a reasonable consumer standard. Otherwise, the court should have considered the obvious possibility that some consumers, out of inattention or ignorance, are led to believe that the product does feature some medical components. As often, the CJEU in its succinct style does not offer an explicit rationale for its decision. The reasonable consumer standard itself, however, must be assumed in order to justify the opinion.

The hypothetical used by FTC chairman Miller is much more explicit about embracing a reasonable consumer standard. He quotes from a ruling of an FTC decision from 1963 to illustrate the concept of the reasonable consumer standard in deceptive advertisements:

> 'An advertiser cannot be charged with liability with respect to every conceivable misconception, however outlandish, to which his representations might be subject among the foolish or feeble-minded. Some people, because of ignorance or incomprehension, may be misled by even a scrupulously honest claim. Perhaps a few misguided souls believe, for example, that all "Danish pastry"[94] is made in Denmark. Is it therefore an actionable deception to advertise "Danish pastry" when it is made in this country [ie, the US]? Of course not. A representation does not become "false and deceptive" merely because it will be unreasonably misunderstood by an insignificant and unrepresentative segment of the class of persons to whom the representation is addressed.'[95]

(b) Assessment under the Pluralistic Consumer Concept

What difference would a more boundedly rational consumer concept make in these cases? Turning first to the Clinique case, it seems clear that the CJEU dodged the problem of balancing the relevant interests in a fair and open way. Rather, the court took a shortcut by implying the reasonable consumer doctrine and positing, without recourse to any empirical data, that consumers are 'apparently' not mislead. An empirically grounded normative concept allows for a richer analysis which better fits the duty of courts to publicly deliberate and defend the outcome of their decisions.[96] As early as in 1985, Richard Craswell argued for undertaking

92 ECJ case 315/92 *Clinique* [1994] ECR I-317, paragraph 23.

93 *Id*, paragraph 21.

94 Danish pastry is a popular type of sweet pastry in the US.

95 Deception Statement, *supra* n 21, III, citation omitted.

96 J. Rawls, *Political Liberalism XLIV* (expanded edition, New York: Columbia University Press, 2005) 212–247; J. Rawls, 'The Idea of Public Reason Revisited', in J. Rawls, *The Law of Peoples*,

explicit normative trade-offs (in the form of cost-benefit analysis) in the determination of the deceptiveness of an advertisement.[97] The pluralistic model advocated here makes good on that claim.

The CJEU should have noted that on the one hand, clearly there were good reasons to allow the company to use the brand name 'Clinique' in Germany. The company did have a legitimate interest to name its product and to advertise it under a brand it chooses. Furthermore, the European treaties provide for a strong protection of the free movement of goods which entails the freedom to sell products under the identical names in different Member States of the EU.[98] An obligation to package and market a product differently in Germany than in other Member States would significantly hamper the companies' ability to engage in cross-border trade. On the other hand, the right to advertise and name one's products is duly limited by the interest of customers not to be misled. Limited attention and associative thinking may have led some consumers to believe that Clinique is indeed medically valuable and therefore has an effect superior to that of competitor's products. The empirical side of the consumer concept would have called for taking these considerations seriously. Such misled beliefs cannot be apodictically ruled out *ex ante* – very much to the contrary, they are highly likely to persist among some consumers. Note also that the direct effect of a name change on perfectly rational consumers would not be deleterious. The company, before unifying their brand names, marketed the product under the name of 'Linique' in Germany.[99] Most fully rational consumers didn't derive any substantial direct advantage from the shift to Clinique. One trademark for them should be just as good as the other (unless they were explicitly searching for 'Clinique' because their initial contact with the product had been in another member state).[100]

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with 'The Idea of Public Reason Revisited' (Cambridge/Mass: Harvard University Press, 1999) 131–180.

97 R. Craswell, 'Interpreting Deceptive Advertising' 65 *Boston University Law Review* 657, 660 (1985); see also R. Craswell, 'Regulating Deceptive Advertising: The Role of Cost-Benefit Analysis' 64 *Southern California Law Review* 549, 552–553 (1991).

98 Art 34, Treaty on the Functioning of the European Union, 2010 *OJ* C 83/47 [hereinafter TFEU].

99 ECJ case 315/92 *Clinique* [1994] ECR I-317, paragraph 3.

100 There may, however, have been indirect effects if the company did pass on costs saved by not having to separately package and label the German products. Whether these savings were substantial and were indeed passed on depends on the competitiveness of the market, the structure of the distribution of the product and other factual circumstances; see R. Craswell, 'Passing on the Costs of Legal Rules: Efficiency and Distribution in Buyer-Seller Relationships' 43 *Stanford Law Review* 361 (1991).

The fact that some consumers will indeed have been misled by the product name should not, however, automatically entail that consumer law has been violated. Insofar, the test proposed here differs from the older 'wayfaring fools' test.[101] Taking behavioral diversity and cognitive limitations seriously merely sets the stage for a publicly defensible normative analysis – a procedure the CJEU obviously shunned. That normative analysis would have to determine whether the potential for misleading inattentive or boundedly rational consumers outweighed the interest of the company in a homogenous marketing of their product across EU borders. Such a procedure addresses the respective stakes of the relevant parties explicitly and in a transparent manner. The interests of the potentially mislead consumers are here given additional weight by the proximity of the marketing strategy to health, instead of mere aesthetic, concerns. A final analysis would probably have necessitated a consumer survey – which is exactly what the trial court envisaged before the CJEU took this option off the table by unilaterally brushing all concerns about consumer deception aside.[102] This example thus shows how taking variance in consumer behavior seriously leads to a fuller, richer and more transparent analysis of the factors determinative of legal decision making.

By the same token, such an analysis would be warranted in the case of the Danish pastry as well. We need not categorically exclude those consumers who may believe that Danish pastry is in fact produced in Denmark or according to a Danish recipe to arrive at the conclusion that the use of the term Danish pastry does not violate Section 5 of the FTCA. In this case, other than in Clinique, there is a strong interest in using that specific term and none else. This is because in the linguistic community of the US, the term 'Danish pastry' has come to denote a particular variety of sweets. It serves a communicative purpose. So fully reasonable consumers, and companies, both have a clear and valuable interest in naming the dish this way. On the other hand, those who mistakenly believe that there is some intimate relation to Denmark do not suffer more than marginal harm.[103] This again distinguishes the case markedly from Clinique with its affinity to unfulfilled promises of health. Unsurprisingly, the sale of pastry under the name of Danish pastry should therefore not be deemed a deceptive practice even under a more boundedly rational consumer concept.

The lessons from these examples should be clear. Consumer concepts predicated on reasonable behavior are blind to bounded rationality. A more bound-

101 See*supra*, n 28.

102 ECJ case 315/92 *Clinique* [1994] ECR I-317, paragraph 6.

103 See Craswell (1985), *supra* n 97, 657, 700.

edly rational, empirically grounded yet normatively reflected consumer concept helps to structure trade-offs in a more precise and transparent way. This can have an effect on the result of a deliberation, as we saw in the Clinique case. Generally, the perspective of bounded rationality suggests a more restrictive policy in misleading and deceptive advertisement. Clearly, however, in a normative analysis the interests of the advertising company and of fully rational persons have to be given due weight. Even when as a consequence the ultimate result remains the same as under a reasonable consumer standard, a democratic society should care about the procedure which led to the result. Explicit trade-offs take all affected parties seriously and offer them reasons they can be expected to accept.[104] This should be a value in itself for any liberal and legitimate legal system.

(2) Example 2: Foodstuff Regulation

The same reasoning can be applied to regulations defining the specific ingredient content of foodstuff and beverages and its disclosure.[105] Lately, this field of law has drawn much academic attention both in the US and in the EU.[106] In the US, caloric menu labeling is hotly discussed,[107] while the EU now starts to slowly experiment with alternative labeling formats which may possibly be more behaviorally informed.[108] However, the key legal concept of human agency used by the judiciary in the EU can be distilled, still today, from a groundbreaking CJEU ruling dealing with consumer expectations derived from the classification of a beverage as 'liqueur': the *Cassis de Dijon* case. The disclosure paradigm shaped through this decision informs the regulation of alcoholic beverages still

104 See on this desideratum Rawls, *supra* n 96, 16, 243; J. Habermas, 'Discourse Ethics: notes on a Program of Philosophical Justification', in J. Habermas, *Moral Consciousness and Communicative Action* (translated by C. Lenhardt and S. Weber Nicholsen, Cambridge/Mass: MIT Press, 1991) 43, 66; J. Habermas, *Between Facts and Norms* (translated by W. Rehg, Cambridge: Polity, 1996) 110; J. Cohen, 'Reflections on Habermas on Democracy' 12 *Ratio Iuris* 385, 398, 403–404 (1999).

105 For a historical overview of food labeling regulation in the EU, see A. Alemanno, *Trade in Food: Regulatory and Judicial Approaches in the EC and the WTO* (London: Cameron May, 2007) 33–71; MacMaoláin, *supra* n 81, 48–55; for the US, see, eg, L. Fitzpatrick, 'Current regulation of food and beverage labelling in the USA', in P. Berryman (ed), *Advances in Food and Beverage Labelling* (Burlington: Elsevier Science, 2015) 15.

106 Monographic treatments include A. Alemanno and S. Gabbi (eds), *Foundations of EU Food Law and Policy: Ten Years of European Food Safety Authority* (Farnham: Ashgate, 2014); Berryman (ed), *supra* n 105; Alemanno, *supra* n 105; C. Ansell and D. Vogel, *What's the Beef?: The Contested Governance of European Food Safety* (Cambridge/Mass: MIT Press, 2006).

107 L. Fitzpatrick, 'Nutrition and related labelling of foods and beverages: the case of the USA', in Berryman (ed), *supra* n 105, 67, 74–76.

108 MacMaoláin, *supra* n 81, 57–58.

today.[109] Furthermore, as we shall presently see, *Cassis de Dijon* exhibits some striking parallels to the US Danish pastry example just discussed.

(a) Exemplary Case: 'Cassis de Dijon'

Decided in 1979, the ruling in *Cassis de Dijon* quickly became one of the cornerstones of the framework of cases opening European markets to products from within the whole European community.[110] Once more, a German regulation restricting the marketing of products was successfully challenged on the European level. The facts are as follows:[111] a supermarket chain intended to import Cassis de Dijon, a fruit liqueur, from France for sale in Germany. However, the German customs authorities supervising the import of alcoholic beverages refused to grant clearance to the consignment. They argued that a fruit liqueur, according to the relevant regulatory provisions, must have a minimum alcoholic content of 25 %. Cassis de Dijon, quite deplorably, fell short of this threshold, reaching only 15–20 %. The supermarket chain challenged the administrative decision and the case wound up before the CJEU. The court ruled that the fixed minimum alcohol content for certain categories of beverages constituted a violation of the basic freedom of the free movement of goods between Member States of the European Community guaranteed by the European treaties.[112] In its opinion, the court considered one particular potential strategy for justifying the minimum thresholds: consumer protection. Minimum alcohol content could serve as a device to redeem the expectations of local consumers who may be used to a certain alcoholic strength of a fruit liqueur. However, the court concluded that such considerations could not legitimize an outright prohibition to market beverages of a certain category which do not attain the threshold of alcoholic content: '[I]t is a simple matter to ensure that suitable information is conveyed to the purchaser by requiring the display of an indication of origin and of the alcohol content on the packaging of the product.'[113]

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109 G. Howells and J. Watson, 'The role of information in "pushing and shoving" consumers of tobacco and alcohol to make healthy lifestyle choices', in Alemanno and Garde, *supra* n 81, 23, 28–33.

110 D. Chalmers, G. Davies and G. Monti, *European Union Law* (2nd ed, Cambrigde: Cambrigde University Press,2010) 744, 763; for the current regulatory framework on alcoholic beverages in the EU, see A. Garde and M. Friant-Perrot, 'The regulation of marketing practices for tobacco, alcoholic beverages and foods high in fat, sugar and salt – a highly fragmented landscape', in Alemanno and Garde, *supra* n 81, 68.

111 ECJ case 120/78 *Cassis de Dijon* [1979] ECR 649, paragraphs 2–4.

112 Today art 34 TFEU.

113 ECJ case 120/78 *Cassis de Dijon* [1979] ECR 649, paragraph 13.

The concept of consumer rationality underlying this statement is clear:[114] Giving information on the content of a food or drink product on the label will infallibly result in the correct information of consumers. This prevents misconceptions about the true percentage of ingredients which may stem from different market customs in different regions or countries. Since consumers are supposed to be rational, ie, attentive and understanding, it truly is 'a simple matter'.

Behavioral research regarding information processing and information overload proves the CJEU plain wrong.[115] Getting the right information across in a supermarket with a multitude of products offered for sale, other customers rushing along, announcements over loudspeakers being made, and special price deals highlighted, is a very contingent, demanding and uncertain operation. An unbridled plurality of stimuli vies for the attention of the consumer in a supermarket environment. Limited cognitive capacities matched with such a possibly bustling atmosphere entail one thing for sure: Making the consumer read and understand the alcohol content of the beverage she buys is not a 'simple matter'.[116]

(b) Assessment under the Pluralistic Consumer Concept

As in the former Clinique and the Danish pastry example, the CJEU should therefore have been more open to embrace a pluralistic consumer concept, countenancing the possibility of inattention and information overload. The notification concerning alcohol content is by far not the only piece of information on the bottle – and the consumer may choose between multiple varieties of alcoholic beverages all unknown to her. The court should not have laconically brushed aside the fact that many customers will not, in the end, have a look at the alcohol content when making a purchase. A simple introspective exercise should make that clear. Just ask yourself: What was the alcohol content of the last bottle of wine you drank? See...

Adhering to an empirically grounded normative model, the court should have noted that on the one hand, while some consumers may in fact read a label indicating alcohol content, many will not. Depending on their expectations, formed by cultural factors and their own experiences, some of these will indeed believe that a fruit liqueur would probably have an alcohol content of around 25 % at least. Misconceptions about the alcohol content therefore have to be expected. On the other hand, there is a manifest interest of the producing

114 Cf Chalmers, Davies and Monti, *supra* n 110, 769.

115 See *supra*, n 12-13, and accompanying text.

116 See also MacMaoláin, *supra* n 81, 47.

company and the importing supermarket to market products across regional and national borders and beyond the community sharing homogenous expectations about alcohol content. Not only is this in line with the basic freedom of cross-border trade and of the free movement of goods, a hallmark of the European internal market;[117] such product diversification in local supermarkets also leads to greater consumer choice. In balancing these issues, the court could have easily reached the conclusion that in the instant case, the facilitation of cross-border trade and the enhancement of consumer choice were to normatively outweigh the possible misconceptions of boundedly attentive consumers. A *lower* content of alcohol, of 15–20 % instead of 25 %, does *not* seem to amount to a deviation from consumer expectations and preferences that causes much noticeable harm, certainly not to consumers' health. The deviation is minor and leads to a slightly milder state of drunkenness, which may, in terms of long-term effects including the following morning, be even viewed as beneficial. The facilitation of cross-border trade and the broadening of consumer choice outweigh these limited concerns. A similar reasoning can be applied to the sale of beer that is not brewed from hops, barley, water and yeast only, ie, in the traditional way (called *Reinheitsgebot* in Germany). In this domain again, in striking down the German *Reinheitsgebot* the CJEU relied exclusively on the purportedly undeniable power of label information in bringing about informed choice of consumers.[118] A transparent trade-off would note that the purity of beer ingredients may be an important feature for traditional beer drinkers who may indeed be misled. But absent any negative health effects of the non-traditional brewing method, consumer choice and free commerce should trump the possible error of those not reading the product label.

The flexibility of transparent trade-offs entails that different factual patterns may lead to different outcomes. In the Cassis de Dijon case, had the deviation from expectations been massive, eg, if the liqueur had not contained any alcohol at all, the trade-off may and should have come out differently. All the more, consumer error ought to have been decisive if the alcohol content had been significantly *higher* than what consumers would have expected, eg, if a 'wine' had contained 30 % of alcohol instead of the usual 11–15 %. A failure to

117 A. Kaczorowska, *European Union Law* (2nd ed, London: Routledge, 2011) 488; Chalmers, Davies and Monti, *supra* n 110, 678.

118 ECJ case 178/84 *Purity Requirement for Beer* [1987] ECR 1227, paragraph 25 ('In any event, such rules go beyond what is necessary to protect the German consumer, since that could be done simply by labeling or notices.') and 35 ('By indicating the raw materials utilized in the manufacture of beer such a course would enable the consumer to make his choice in full knowledge of the facts …' [citations omitted]).

read the label in this case could lead to serious health problems due to intoxication, which would then tip the balance in favor of a marketing ban. The CJEU, it has to be noted, does also take health risks into account.[119] This, however, forces the court to implicitly modify its consumer concept. A more transparent concept such as the one proposed here makes these different balancing processes explicit. As a general rule, it may be said that consumer errors resulting from cross-border trade and induced by inattention to label information have to be addressed by food labeling strategies which are cognitively optimized, not by insulating national markets from foreign food products. If, however, deviations from expectations are massive or if they engender significant health risks, mere informational strategies are insufficient and bans of the concrete marketing procedure may be warranted.

A transparent analysis of interest, therefore, not only does justice to the empirical data on consumer behavior. It also allows for a case-sensitive weighing of the consequences of potential consumer error against the benefits of free trade and consumer choice. The CJEU, by turning a blind eye to boundedly rational behavior, needlessly swept the richness of this analysis and of the variety of different real-life constellations under the rug.

C Product Liability

Another area closely linked to cognitive standards is product liability. Since total product safety can never be achieved, the question arises: what are the cognitive qualities of the representative user that product liability is supposed to optimally protect? The law has answered this question differently over different times in the US and the EU. Today, we can discern a trend towards a more boundedly rational user concept in the US, while courts in the EU still seem to adhere to a traditional model of rational information processing.

1 Cognitive Standards of Users in Product Liability: A Brief Descriptive Survey

a) US: Towards an Acknowledgement of Bounded Rationality

Product liability has vastly matured as a specific field of legal analysis over the last decades in the US. As has been noted, '[n]o area of personal injury law has changed as dramatically in the past century as the law governing liability for

119 See *supra*, n 62.

defective products.'[120] The field has taken yet another decisive demarche with the publication of the *Restatement (Third) of Torts: Products Liability* in 1998 which significantly altered the legal concept of human agency employed in the product liability context. The paper first descriptively examines two legal categories that are intimately related to presuppositions of cognitive standards of users or consumers, and which were significantly altered by the *Third Restatement*: the consumer expectations test and the rules governing product warnings.

(1) From the Consumer Expectations Test to Risk-Utility Analysis

Following the publication of the *Restatement (Second) of Torts* in 1965, the consumer expectations test for a long time was applied as the main procedure to establish the defect of a product.[121] It holds that when a 'product fail[s] to perform as safely as an ordinary consumer would expect when used in an intended or reasonably foreseeable manner', the product is defective in design.[122] The relevant standard is the 'reasonable contemplation of the ordinary consumer'.[123] Just like the FTC's interpretation of the deceptiveness of an advertisement, the consumer expectation test is thus tied in its usual operative mode to the model of the reasonable consumer.[124] It is, however, not the prevalent method anymore to determine a product defect. Having been in use during much of the 20th century, it was replaced as an independent standard in the *Restatement (Third) of Torts: Products Liability* in favor of the risk-utility test.[125]

Some jurisdictions have entirely rejected the consumer expectations test, before and more so after the *Third Restatement*.[126] In the other jurisdictions, it is

120 M.A. Franklin, R.L. Rabin and M.D. Green, *Tort Law and Alternatives* (9th ed, New York: Foundation Press, 2011) 551.

121 C.J. Miller and R.S. Goldberg, *Product Liability* (2nd ed, Oxford: Oxford University Press, 2004) 356; D.A. Kysar, 'The Expectations of Consumers' 103 *Columbia Law Review* 1700, 1708–1715 (2003).

122 *Barker* v *Lull Eng'g Co*, 573 P 2d 443, 455–456 (Cal 1978).

123 *Id*, 425.

124 Cf also A. Schwartz, 'Proposals for Products Liability Reform: A Theoretical Synthesis' 97 *Yale Law Journal* 353, 384–385 (1988).

125 See American Law Institute (ed), *Restatement (Third) of Torts: Products Liability* (St Paul/Minn: American Law Institute Publishing, 1998) § 2 cmt a; see also J.A. Henderson, jr and A.D. Twerski, 'Achieving Consensus on Defective Product Design' 83 *Cornell Law Review* 867, 879–882 (1998).

126 See, eg, *Prentis* v *Yale Mfg Co*, 365 N W 2d 176, 185–186 (Mich 1984); *Turner* v *General Motors Corp*, 584 S W 2d 844, 851 (Tex 1979); see also *Soule* v *General Motors Corp*, 8 Cal 4th 548, 570 n 7 (1994); for an overview of the residual retention of the consumer expectations test by some courts and its proximity to a disguised risk-utility test, see Kysar, *supra* n 121, 1724–1728.

not a necessary element to establish design defects any more. California is an example. In *Soule* v *General Motors*, the Supreme Court of California held that if the consumer expectations test proved to be negative, a design defect, and thus liability, could still be based on expert testimony regarding risk-benefit analysis.[127] The adherence to a rationality-driven reasonable consumer concept is thus substantially weakened. Even if consumers *de facto* deviate from the reasonable consumer standard, this does not bar them from recovering under the risk-utility test.

This is not to say that the risk-benefit analysis is devoid of problems from the perspective of bounded rationality,[128] nor does it *necessarily* lead to a more behavioral approach to product liability. One open flank is the reliance on the foreseeability of harm in the risk analysis[129] – which may, *inter alia*, be affected by hindsight bias by juries during trials,[130] and by optimism bias by consumers making purchases.[131] However, risk-utility analysis does move away from the intimate identification of consumer concepts with strong forms of rationality not necessarily but historically often inherent in the consumer expectations test. It therefore, in practice, facilitates a behaviorally informed perspective which can be integrated into a subjective assessment of risk and utility.[132] The most visible reorientation of product liability toward a boundedly rational consumer model, however, can be witnessed in the changed treatment of product warnings and safety instructions, to which we now turn.

127 *Soule* v *General Motors Corp*, 8 Cal 4th 548, 567 (1994).

128 *Banks* v *ICI Americas, Inc*, 450 S E 2d 671, 674 (Ga 1994) ('Numerous lists of factors to be considered by the trier of fact in balancing the risk of the product against the utility or benefit derived from the product have been compiled by various authorities.'); Miller and Goldberg, *supra* n 121, 365 (noting the complexity of the risk-utility test and difficulties in balancing concrete risks and benefits); Kysar, *supra* n 121, 1779–1782 (demonstrating the reemergence of behavioral and normative questions within the risk-utility framework).

129 *Restatement (Third) of Torts: Products Liability*, *supra* n 125, § 2 cmt f.

130 See, eg, B. Fischhoff, 'Hindsight ≠ Foresight: The Effect of Outcome Knowledge on Judgment under Uncertainty' 1 *Journal of Experimental Psychology: Human Perception and Performance* 288 (1975); N.J. Roese and K.D. Vohs, 'Hindsight Bias' 7 *Perspectives on Psychological Sciences* 411 (2012); for legal applications of the phenomenon, see, eg, J.J. Rachlinski, 'A Positive Psychological Theory of Judging in Hindsight' 65 *University of Chicago Law Review* 571 (1998).

131 See, eg, N.D. Weinstein, 'Unrealistic Optimism About Future Life Events' 39 *Journal of Personality and Social Psychology* 806 (1980); N.D. Weinstein and W.M. Klein, 'Resistance of Personal Risk Perceptions to Debiasing Interventions', in Gilovich, Griffin and Kahneman (eds), *supra* n 8, 313.

132 On that move, and some of the challenges it faces, see, eg, Kysar, *supra* n 121, 1739–1741.

(1) Warnings and Safety Instructions: From Comment j to Comment l

Almost every product can be handled in some way so as to pose a threat to the user or third parties. A narrow focus on user protection would require manufacturers to do their utmost to design such dangers away. However, prices as a result can be expected to rise, and consumer choice to be diminished.[133] Therefore the question emerges: should product liability law require manufacturers to design these dangers away if that is feasible, or does a warning putting users on notice suffice? These questions are, as Alan Schwartz correctly remarks, intimately linked with legal concepts of human agency: '[W]arning cases are often resolved according to the decisionmaker's presuppositions about consumer competence. A judge either assumes, subject to the evidence, that consumers generally can draw the appropriate inferences from general warnings of danger and category instructions, or she assumes the contrary.'[134]

The US has witnessed a remarkable reconsideration of the trade-off between warnings and alternative designs during the last decades. It can be followed along the imprints this tension has left in the comments of the *Restatement (Second)* and *(Third) of Torts*, respectively. The former, which was in the relevant part assembled by Dean William Prosser, held in its § 402A that the seller of a defective product is liable to the user. Comment j qualified the relationship between warnings and product defects as follows:

> '[W]here warning is given, the seller may reasonably assume that it will be read and heeded; and a product bearing such a warning, which is safe for use if it is followed, is not in defective condition, nor is it unreasonably dangerous.'[135]

On the face of it, this seems to imply that a manufacturer may disregard his duty to construct a safe product if only he adequately warns of the danger inherent in the unsafe product[136] – warnings trump design.[137] While some courts chose to ignore comment j,[138] this reading was followed by a number of scholarly commentators[139] as well as courts. Dean Prosser may actually never have originally intended

133 Craswell, *supra* n 100.

134 Schwartz, *supra* n 124, 397.

135 American Law Institute (ed),*Restatement (Second) of Torts* (1965) § 402A cmt j.

136 D.G. Owen, 'Information Shields in Tort Law', in M.S. Madden (ed), *Exploring Tort Law* (Cambridge: Cambridge University Press, 2005) 295, 306.

137 *Id*, 307.

138 *Id*, 308 n 52.

139 G.L. Priest, 'Strict Product Liability: The Original Intent' 10 *Cardozo Law Review* 2301, 2324 (1989); J.A. Henderson jr and A.D. Twerski, 'The Politics of the Product Liability Restatement' 26 *Hofstra Law Review* 667, 689 (1998); H. Latin, '"Good" Warnings, Bad Products, and Cognitive Limitations' 41 *UCLA Law Review* 1193, 1196 (1994).

comment j to wreak such a devastating effect in product liability law.[140] However, examples are numerous of cases turning on his sentence to deny recovery to plaintiffs hurt by unsafe products that came with a product warning.[141]

One particularly striking case, *Skyhook Corp* v *Jasper*, was decided by the Supreme Court of New Mexico in 1977.[142] It involved a crane used for road work. The device was not insulated. If operated too close to high voltage lines, workers mounted on it were therefore prone to receive severe electric shocks. However, a 'clearly visible written warning appeared on the boom. In this warning it was stated: "All equipment shall be so positioned, equipped or protected so no part shall be capable of coming within ten feet of high voltage lines."'[143] The warning notwithstanding, a worker was struck lethally by an electric shock while operating the crane. The fact finder assumed that the worker had probably seen and not heeded the warning. An insulation link would have been available for 300–400 $ per crane. The New Mexico Supreme Court, however, explicitly relied on comment j to rule that the warning was sufficient, and that the defendant was therefore not bound to install the insulation device.[144]

The concept of human agency underlying such rulings is informed by a strong version of rationality. It assumes that users read and heed warnings, that they are attentive and capable of correctly processing information. The conflict of this assumption with actual behavior, as evidenced by *Skyhook Corp* v *Jasper*, generated a significant degree of scholarly protest.[145] The *Restatement (Third) of Torts: Products Liability*, published in 1998 and acknowledging this resistance, fully reversed its stance on the effect of product warnings vis-à-vis the *Second Restatement*. § 2 now reads in part: A product

> 'is defective in design when the foreseeable risks of harm posed by the product could have been reduced or avoided by the adoption of a reasonable alternative design by the seller [...] and the omission of the reasonable alternative design renders the product not reasonably safe.'[146]

140 Owen, *supra* n 136, 309–317.

141 See, eg, *Dugan* v *Sears, Roebuck & Co*, 447 N E 2d 1055, 1058 (Ill App Ct 1983); *Simpson* v *Standard Container Co*, 527 A 2d 1337, 1341 (Md Ct Spec App 1987).

142 *Skyhook Corp* v *Jasper*, 560 P 2d 934 (N M 1977).

143 *Id*, 936.

144 *Id*, 938.

145 A.D. Twerski, A.S. Weinstein, W.A. Donaher and H.R. Piehler, 'The Use and Abuse of Warnings in Product Liability – Design Defect Litigation Comes of Age' 61 *Cornell Law Review* 495, 506–510 (1976);Latin, *supra* n 139; A.D. Twerski, 'In Defense of the Product Liability Restatement – Part I' 8 *Kansas Journal of Law and Public Policy* 27, 29 (1998).

146 *Restatement (Third) of Torts: Products Liability*, *supra* n 125, § 2.

Comment l explicates the role of product warnings in this framework:

> 'Reasonable design and instructions or warnings both play important roles in the production and distribution of reasonably safe products. In general, when a safer design can reasonably be implemented and risks can reasonably be designed out of a product, adoption of the safer design is required over a warning that leaves a significant residuum of such risks. For example, instructions and warnings may be ineffective because users of the product may not be adequately reached, may be likely to be inattentive or may be insufficiently motivated to follow the instructions or heed the warnings. However, when an alternative design to avoid risks cannot reasonably be implemented, adequate instructions and warnings will normally be sufficient to render the product reasonably safe. Warnings are not, however, a substitute for the provision of a reasonably safe design.'[147]

Thus, whenever reasonably possible, the manufacturer now has to reduce the risk to users by an alternative design. Warnings are not sufficient any more: design has come to trump warnings. This line of reasoning has now been endorsed by most courts in the US.[148] The holding of *Skyhook Corp* v *Jasper* was overruled by the New Mexico Supreme Court in 1992.[149] A further crane case illustrates the changed attitude of courts towards the relationship of product warnings to design defects. In *Crow* v *Manitex, Inc*,[150] the extension of a crane was fixed in the wrong position, which caused it to suddenly retract into its telescopic shell. The plaintiff was at that time suspended in the air, sitting in a basket attached to the extension. The attachment broke when the extension retracted, the plaintiff fell to the ground and was injured. A warning was in place on the crane and in the operating manual notifying workers that a mispinning of the extension may lead to its retraction. Nonetheless, the court ruled that there was a possibility of a design defect in the pinning system, which made it likely that the extension would be mispinned at some point.[151] The concrete warning this time did not overrule the manufacturer's obligation to choose a safer design.

The best illustration of the turnaround concerning product warnings, however, is probably found in the hotly contested opinion the majority of the Texas Supreme Court rendered in *Uniroyal Goodrich Tire Company* v *Martinez*. The plaintiff, Mr. Martinez, a car mechanic, mounted a 16" tire on a 16.5" rim, in blatant disregard of a conspicuous warning reading:

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147 *Id*, § 2 cmt l.

148 Owen, *supra* n 136, 320–321; R.C. Ausness, 'When Warnings Alone Won't Do: A Reply to Professor Philipps' 26 *Northern Kentucky Law Review* 627, 631–632 (1999).

149 *Klopp* v *Wackenhut Corp*, 824 P 2d 293, 297 (N M 1992): 'A risk is not made reasonable simply because it is made open and obvious to persons exercising ordinary care.'

150 *Crow* v *Manitex, Inc*, 550 N W 2d 175 (Iowa Ct App 1996).

151 *Id*, 180.

> 'NEVER MOUNT A 16" SIZE DIAMETER TIRE ON A 16.5" RIM. Mounting a 16" tire on a 16.5" rim can cause severe injury or death.
>
> NEVER inflate a tire which is lying on the floor or other flat surface. Always use a tire mounting machine with a hold-down device or safety cage or bolt to vehicle axle.
>
> NEVER inflate to seat beads without using an extension hose with gauge and clip-on chuck.
>
> NEVER stand, lean or reach over the assembly during inflation.'[152]

Mr Martinez had seen and understood the warnings,[153] but did not heed a single one of them. He inflated the tire while it lay on the ground and leaned over it. The tire exploded during the mounting procedure, seriously injuring the mechanic. An alternative design which would have prevented the tire from exploding was available but not used by the manufacturer. The majority of the Texas Supreme Court expressly rejected comment j and relied on comment l to affirm the liability of the manufacturer. The warning was considered a factor in the determination of the safety of the product, but it did by no means shield the producer from liability.[154]

The sweeping victory of the reinterpretation of the role of product warnings, as championed by the *Third Restatement*, only knows a few exceptions. Only a minority of jurisdictions still adheres to the reading of comment j that cancels out any duty to produce a safer product.[155]

The concept of human agency thus has dramatically and fundamentally changed in the context of product warnings in the US. It has moved from a strong presumption of rationality to a vast recognition of bounded rationality, more specifically of limited attention. This turn followed a string of scholarly articles which stressed the need to take bounded rationality into account in product liability.[156] But not only that: product warnings constitute a particularly interesting case for the study of concepts of human agency because the *Third Restatement* explicitly and with unprecedented openness states the presuppositions which led to comment l: '[U]sers of the product may not be adequately reached, may be likely to be inattentive or may be insufficiently motivated to follow the instructions or heed the warnings.'[157] Furthermore, bounded rationality in this area is

152 *Uniroyal Goodrich Tire Co* v *Martinez*, 977 S W 2d 328, 332 (Tex 1998).

153 *Id*, 343.

154 The dissenting opinion gives the warning a greater weight in determining the safety of the product, and arrives at the conclusion that the tire was not defective. It joins the majority opinion in their analysis of the frailty of human cognition and attention, but refuses to concede controlling power to this finding: *id*, 345–347.

155 Owen, *supra* n 136, 320.

156 Twerski, Weinstein, Donaher and Piehler, *supra* n 145, 506–510; Latin, *supra* n 139, 1206.

157 *Restatement (Third) of Torts: Products Liability*, *supra* n 125, § 2 cmt l.

now widely acknowledged in the US literature and taken as a basis to normatively underpin the insufficiency of mere warnings.[158] And the majority opinion of the Texas Supreme Court in *Uniroyal Goodrich Tire Co* v *Martinez* even explicitly cited articles and their social science research findings[159] and went on to explain: '[I]t is precisely because it is not at all unusual for a person to fail to follow basic warnings and instructions, that we have rejected the superseded Comment j.'[160] The court thus explicitly refers to and embraces the concept of bounded rationality and limited attention and makes it the basis of its holding. The dissent of four judges, however, shows that the issue is still far from being settled. But the tendency is obvious. US authorities, courts, scholars and restatement reporters draw more and more extensively and explicitly on social science research to justify the application of a boundedly rational model of user behavior in product liability.

b) EU: Clinging to Full Rationality

In the EU, this degree of explicit interdisciplinary reasoning has not yet made its way into mainstream legal analysis in product liability, particularly not with respect to the judiciary. This can be noted both in the lingering of the consumer expectations test, which has not been fully supplemented by a risk-utility test, and in the treatment of warnings and safety instructions vis-à-vis reasonable alternative design patterns – the very features that drove the tendency towards the recognition of bounded rationality in the US.

(1) The Consumer Expectations Test

The core of product liability in the EU is governed by a directive.[161] In its Article 6, it defines that a 'product is defective when it does not provide the safety which a person is entitled to expect, taking all circumstances into account …' The language is strikingly indebted to comments g and i of § 402A of the *Restatement (Second) of Torts* which focused on the expectations of the ordinary or reasonable consumer.[162] Unsurprisingly, European courts have generally adopted a version

158 Owen, *supra* n 136, 328–330.

159 *Uniroyal Goodrich Tire Co* v *Martinez*, 977 S W 2d 328, 336 (Tex 1998).

160 *Id*, 337 [citations omitted].

161 Council Directive 85/374/EEC of 25 July 1985 on the approximation of the laws, regulations and administrative provisions of the Member States concerning liability for defective, 1985 *OJ* L 210/29 [hereinafter: Product Liability Directive].

162 Miller and Goldberg, *supra* n 121, 355–356.

of the consumer expectation test. Most of the relevant cases have been decided by national courts rather than the CJEU so far. British[163] and Spanish courts,[164] for example, have applied a consumer expectations test. The same holds true for German courts which have consistently noted that the standard for assessing consumer expectations is necessarily an objective one.[165] Objective standards, however, tend to stress average reasonableness as individual idiosyncrasies and cognitive limitations of minorities are brushed aside.[166] The consumer expectations test, which has been shown to be linked to a standard of reasonable expectations and therefore of strong rationality,[167] still is the main procedure for determining product defects in the EU. Only surreptitiously and hesitantly are components of a risk-utility test being introduced into product liability analysis.[168]

(2) Warnings and Safety Instructions

As seen in the review of the US cases, the dominant form of rationality in product liability can be most easily gathered from the treatment of product warnings. This is the domain which has proven a fertile ground for the integration of social science research into product liability analysis in the US. In the EU, the terrain looks rather bleak. While courts are divided over the subject matter of the relevance of warnings vis-à-vis reasonable alternative designs, the concept of human agency underlying both strands of reasoning still seems to be closely tied to rational actor models.

In Germany, for example, we find diverging court decisions on the question of product warnings over last couple of years. While some courts originally

163 See in particular *A* v *National Blood Authority* [2001] 3 All E R 289 (Q B D), paragraphs 71, 80; *B* v *McDonald's Restaurant Ltd* [2002] EWHC 490 (Q B), paragraphs 73, 77; Miller and Goldberg, *supra* n 121, 356–357; M. Brook and I. Forrester, 'The use of comparative law in A & Others v Blood Authority', in D. Fairgrieve (ed), *Product Liability in Comparative Perspective* (Cambridge: Cambridge University Press, 2005) 13, 17 ('reasonable expectations of the public at large').

164 M. Martín-Casals, 'Spanish product liability today – adapting to the "new" rules', in Fairgrieve (ed), *supra* n 163, 51–52.

165 Bundesgerichtshof [Federal High Court], 6 June 2009, *Neue Juristische Wochenschrift* 2952, 2952–2953 (2009) (repeating the formulation of article 6 of the Product Liability Directive as the starting point of the analysis).

166 Miller and Goldberg, *supra* n 121, 367.

167 *Supra*, part II C 1 a) (1).

168 Miller and Goldberg, *supra* n 121, 356–357; Bundesgerichtshof, 6 June 2009, *Neue Juristische Wochenschrift* 2952 (2954) (2009) (holding that the US risk-utility test may be one component in assessing the defectiveness of products).

adopted the warning-trumps-design approach, similar to the old comment j in the US, very recent decisions by the Bundesgerichtshof, the Federal Court of Justice, have challenged this view. As will be shown, this demarche does not, however, rely on a modernized concept of human agency.

(a) Warnings as Liability Shields

In the strand of opinions adopting the warning-trumps-design approach, the possibility of redesigning the product in a safer way is not even envisioned.[169] All that courts require under this prong is a warning, and if the warning is adequately placed, it relieves the manufacturer from liability. The case of the Higher Regional Court [Oberlandesgericht] Koblenz is instructive. Its factual pattern bears clear resemblance to the *Uniroyal Goodrich Tire Co* v *Martinez* case decided by the Texas Supreme Court. However, the holding is diametrically opposed to the one of the Texan case.

The facts of the German case are as follows.[170] A machine for kneading PVC got stuck for unknown reasons. The operating manual for this event described a specific routine of opening the machine using special screws which are provided as standard equipment with the machine. However, the screws had been lost over the years. Therefore the plaintiff, a worker, decided to pursue a different route to get the machine unstuck: He set it in motion in order to heat the PVC and to open it without the special screws. The operation lead to an unnaturally elevated pressure level inside the machine. Since it still didn't open, the plaintiff mounted on the machine in disregard of warnings in the instruction manual. They specify that while trying to open the machine, nobody must be within reach of those parts of the machine that can swing open (even in case of standard operation). While the plaintiff stood on the machine, a part of it suddenly yielded to the pressure and burst open, severely injuring the plaintiff.

As noted, this case bears striking factual parallels with *Uniroyal Goodrich Tire Co* v *Martinez*. In both cases, the plaintiff deviates from standard operating instructions. He does not heed a clear warning. Due to the deviant use of the product, pressure inside it rises until it bursts and injures the plaintiff. The legal consequences under EU law as interpreted by the OLG Koblenz, however, are quite the opposite. The German court does not even address the question of

169 See Oberlandesgericht Karlsruhe [Higher Regional Court] 7 August 1990, *Neue Juristische Wochenschrift – Rechtsprechungsreport* 285 (1992); Oberlandesgericht Koblenz 29 August 2005, *Neue Juristische Wochenschrift – Rechtsprechungsreport* 169 (2006).

170 Oberlandesgericht Koblenz *Neue Juristische Wochenschrift – Rechtsprechungsreport* 169, 170 (2006).

whether a reasonable alternative design could have made the product safer. It merely states that the clear instructions and warnings were sufficient to prevent the product from being defective since following the instructions would have averted the accident.[171] The court draws on a series of older decisions of the German Federal Court of Justice[172] to underpin its reasoning that warnings indeed are necessary but that, if given, they are also sufficient. On this reading of EU law, comment j is thus still very much in fashion: Warning trumps design. The contrast to *Uniroyal Goodrich Tire Co* v *Martinez* could not be starker; under that analysis, the outcome of this case in the EU would have been just the inverse from the reasoning of the majority in *Uniroyal Goodrich Tire Co* v *Martinez*.

What do the cited decisions reveal in terms of their rationality assumptions? The model of human agency underpinning those decisions must assume full rationality in following the instructions manual to the letter and in heeding warnings. The possibility of boundedly rational behavior is not even acknowledged in a single footnote.

(b) The Primacy of a Reasonable Alternative Design

Until very recently, product warnings could therefore effectively shield the manufacturer from liability. In recent decisions concerning the relevance of product warnings, however, the pendulum has swung to the other extreme. Most notably, the German Federal Court of Justice in a groundbreaking ruling in 2009 held that warnings only play a subordinate role in determining whether a product has a design defect.[173] Primarily, a reasonable alternative design has to be implemented. Only if such a design is not available, do warnings come in.

So after the 2009 decision of the German Federal Court of Justice, design trumps warnings. On the surface level, this seems to parallel the move by most jurisdictions in the US. The deeper question lingering behind this reversal, how-

171 Oberlandesgericht Koblenz *Neue Juristische Wochenschrift – Rechtsprechungsreport* 169, 171 (2006).

172 Bundesgerichtshof, 24 January 1989, *Neue Juristische Wochenschrift* 1542, 1544 (1989); Bundesgerichtshof, 11 December 1991, *Neue Juristische Wochenschrift* 560, 560–561 (1992); Bundesgerichtshof, 18 May 1999, *Neue Juristische Wochenschrift* 2815, 2816 (1999) (noting that if the manufacturer has reason to know that dangers in using its product persist even under ordinary and correct use, it is bound to issue warnings, not to redesign the product).

173 Bundesgerichtshof, 16 June 2009, *Neue Juristische Wochenschrift* 2952, 2954 (2009) (holding that BMW may have been obliged to implement an alternative design that could have prevented the airbags of its 330 series from setting off when riding over rocky terrain and that a warning in the instructions manual would only suffice if the alternative design was not reasonably feasible); see also Bundesgerichtshof, 5 February 2013, *Neue Juristische Wochenschrift* 1302 (2013).

ever, is: does it harbinger a modification of the concept of human agency toward a more boundedly rational perspective? Surprisingly, the clear answer is: no. The reasoning of the German Federal Court of Justice is not driven by empirical findings or even conjectures about the limits of human cognition and attention. Not even in a single footnote does the court reference these concepts. Rather, the decision is, as often in Germany, based on doctrinal reasoning interpreting the structure and content of the relevant statutory law.[174] The same holds true for a decision by a regional court which also found that warnings don't trump design.[175] Only a few scholars do make reference to a model incorporating limited attention.[176] None of this is reflected in the court rulings, however.

Therefore, although these decisions on the surface level seem to embrace the new doctrine of comment l, their deeper reasoning is still founded on a rational actor model. This can be noted more specifically on two distinct occasions in the decisions. First, if and when warnings do come into play, they are uncritically assumed to foster an informed decision.[177] No reference is made, as in *Uniroyal Goodrich Tire Co* v *Martinez* or in comment l of the *Third Restatement of Torts*, to cognitive limitations possibly rendering a perfectly informed decision less than self-evident. Second, and most notably, German courts invoke a peculiar, rebuttable presumption for causation of loss. Manufacturers are allowed to rely on warnings if an alternative design is not reasonably feasible. If, however, even such a warning was not issued, the manufacturer may be held liable. The injured plaintiff then has to prove that a warning would have prevented the damage. If, the warning notwithstanding, the plaintiff had engaged in the dangerous activity in any case, the lack of warning could not be considered a but-for cause for the accident. Strikingly, the presumption in these cases establishes that an adequate warning in fact would have prevented the damage. In justifying this result, the Federal Court of Justice literally states that *as a matter of fact* it can be expected that a clear and plausible warning will be heeded.[178] The court argues as if it wanted to emulate the language of the superseded comment j to the closest extent possible. Rather than destabilizing the notion of strong rationality, the latest

174 Bundesgerichtshof, 16 June 2009, *Neue Juristische Wochenschrift* 2952, 2953–2954 (2009).

175 Landgericht Düsseldorf [regional court], 30 October 2005, *Neue Juristische Wochenschrift – Rechtssprechungsreport* 1033, 1034 (2006).

176 G. Wagner, in M. Habersack et al (eds), *Münchener Kommentar zum Bürgerlichen Gesetzbuch vol 5 [Munich Commentary on the Civil Code]* (6th ed, Munich: C H Beck, 2013) § 823 paragraph 657; Miller and Goldberg, *supra* n 121, 432, 438.

177 Bundesgerichtshof, 16 June 2009, *Neue Juristische Wochenschrift* 2952, 2954 (2009).

178 Bundesgerichtshof, 12 November 1991, *Neue Juristische Wochenschrift* 560, 562 (1992); Bundesgerichtshof, 16 June 2009, *Neue Juristische Wochenschrift* 2952, 2956 (2009).

string of court rulings, under the guise of a diminished relevance of warnings, thus actually all but *entrenches* the rational actor model.[179]

So while scholarship and court rulings in the US have gravitated towards a gradual recognition of the limited human capacities of cognition and attention in product liability, European courts continue to base their decisions on a model of strong rationality. This can be noticed both in the prevalence of the consumer expectation test and in the unwarranted hypothesis that users will read and heed product warnings. The strikingly noticeable descriptive disconnect between the two Western legal spheres in their model of rationality calls for a normative evaluation of the specific advantages and disadvantages of the respective analytic schemes, to which we now turn.

2 Normative Implications of Behavioral Economics for Product Liability

From a normative perspective, many factors speak for an implementation of the US model in the domain of product liability, ie, for a more boundedly rational concept taking account of user inattention and other cognitive limitations.[180] Douglas Kysar, for example, has prominently advocated the departure from traditional readings of the consumer expectations or the risk-utility test in order to fully accommodate the impact of cognitive biases on user behavior.[181] However, some adjustments may have to be made to both the US and the EU doctrine to reach an equitable result. Two arguments can be immediately advanced in favor of the US position. First, taking bounded rationality seriously should lead to fairer, more precise and more transparent trade-offs.[182] Second, while protecting consumers from harm is arguably not the only aim of the framework of product liability,[183] an analysis of the relevant interests still reveals that in a number of cases, bounded rationality should be the decisive factor. In concrete terms, this would mean, for example, that warnings do not trump design. Rather, reasonable

179 The conclusion that the underlying concept of agency has not morphed into a more boundedly rational one is corroborated by a review of 15 German cases pertaining to product warnings under EU law and decided in recent years. It turns out that none of the cases, decided between 1989 and 2013, makes any reference to phenomena of bounded rationality or limited attention capacity. The list of cases is on file with the author.

180 For an early critique of this tendency, see, however, Schwartz, *supra* n 124, 374–384.

181 Kysar, *supra* n 121, 1704–1705, 1766–1782.

182 *See supra*, parts II A and II B 2 b).

183 Minimizing the costs of precaution is another obvious aim, see G. Calabresi, *The Cost of Accidents* (New Haven: Yale University Press, 1970); furthermore, achieving a sufficient level of supply for broad consumer choice is a third objective.

alternative designs would have to be implemented if they can be expected to reduce the probability of harm to boundedly rational users.

To determine in which cases such reasoning is warranted, we have to first gather information on the relevant interests of the parties affected by a product liability regime geared toward the recognition of bounded rationality. On the one hand, setting incentives for companies to make products safer is likely to raise the costs of production. A warning in practically all cases will be cheaper than the development and implementation of a more protective reasonable alternative design. In a competitive market, these elevated marginal costs will likely translate into a slightly higher price of the product[184] which hurts all consumers, even those less prone to inattention and cognitive limitations. Secondly, changing the design of the product may make it more difficult to handle. Finally, it is sometimes argued that depriving inattentive consumers from compensatory claims is a way of enforcing responsibility for inattention and biases.[185]

On the other hand, users may suffer harm due to boundedly rational behavior. Examples can be gathered from the reviewed cases. When Mr Martinez, the car mechanic, leaned over the tire while inflating it, despite his reading and understanding of the clear warning not to do so, one plausible explanation for his behavior is that he was optimistically biased. He may well have figured that harm would simply not strike him, or that it was at least more unlikely than it in fact was. Optimism bias may well have been what motivated the German worker in the PVC machine case, too. After all, he mounted on a congested, highly pressurized machine to repair it instead of heeding the instructions contained in the instructions manual which were known to him.[186] Besides optimism bias, generally limited attention to the risks involved may have been another factor explaining the behavior of these individuals. It is also the most likely explanation for the death of the worker operating the uninsulated crane in New Mexico in the 70s. All these examples show how product design and boundedly rational behavior can combine to inflict significantly harm, and eventually even kill users.

Having thus laid out the different interests involved, how should they be evaluated from a normative standpoint? As a technical matter, such weighing can be integrated into a risk-utility test which is expanded to specifically include the risk born by boundedly rational users. The outcome of this trade-off depends clearly on the nature of the harm and the probability that it will ensue given a boundedly rational agent. In the abstract, it is difficult to offer conclusive guide-

184 See Craswell, *supra* n 100.

185 Owen, *supra* n 136, 329–330; Ausness, *supra* n 148, 628.

186 Oberlandesgericht Koblenz, 29 August 2005, *Neue Juristische Wochenschrift – Rechtsprechungsreport* 169, 170 (2006).

lines. However, as a general matter, it seems safe to say that whenever serious mutilations or even the death of users are a possible consequence of boundedly rational behavior, even alternative designs that significantly drive up the costs of the product should be implemented.[187] From a normative vantage point, we should be more concerned with grave and possibly irreversible damage to the health of users than with a marginal rise in the cost of the product. It is true that these costs will partly be borne by fully rational users. Under conditions of uncertainty, however, it is not even clear what the proportion of strongly and boundedly rational users will be. Unless it can be shown that boundedly rational behavior can be factually ruled out, the concerns of boundedly rational users should be prioritized in product liability: Health issues ought to normatively outweigh mere monetary/economic losses.

Furthermore, the manufacturer will often be the cheapest cost avoider.[188] It is in control of the production process and only has to act once in making a product marginally safer. In the alternative, a multitude of users have to exercise marginally elevated care. Given limited attention capacity, this comes at the cost of crowding out attention on other, potentially socially more useful activities. Since the adaptation by one actor, the manufacturer, reduces the attention costs of many users, it seems often more efficient to place the burden on the manufacturer rather than the user.

This is not to say that warnings can never be sufficient. As noted, the ease in handling the product is a further factor to be considered. If the implementation of additional safety measures defeats the purpose of the product, it has to be asked whether the product should be marketed at all.[189] The same holds true if a reasonable alternative design is not available. An outright ban of products should nonetheless be a rare exception. However, in those cases in which a reasonable alternative design is indeed available and could be implemented without jeopardizing the usefulness of the product, such as in *Skyhook Corp* v *Jasper* and *Uniroyal Goodrich Tire Company* v *Martinez*,[190] greater weight should be accorded to the concern of harm resulting from boundedly rational behavior than to the monetary concern of raised production costs.

187 Cf Grundmann, *supra* n 83 (arguing that whenever existential risks are involved, bounded rationality should be given substantial weight in legal analysis).

188 *Uloth* v *City Tank Corp*, 384 N E 2d 1188, 1192 (1978); for a critical view on this argument, see Ausness, *supra* n 148, 640–641.

189 *Restatement (Third) of Torts: Products Liability*, *supra* n 125, § 2 cmt d, e.

190 *Skyhook Corp* v *Jasper*, 560 P 2d 934, 936 (N M 1977); *Uniroyal Goodrich Tire Co* v *Martinez*, 977 S W 2d 328, 337–338 (Tex 1998).

Finally, what about the objection that users should assume responsibility of their limited attention and cognition by bearing the consequences? This argument can be understood, and countered, in two ways. First, one could argue that letting harm rest with users will lead to more diligent behavior. Users will eventually learn from their mistakes. However, learning effects do not follow automatically from mistakes.[191] Furthermore, they are useless if the user is incapacitated by the accident to a degree that bars her from future use of the product. And finally, even if a learning curve is started after the first incident, this is unhelpful in preventing the (possibly grave) accident in the first place. Second, it could still be said that even granting this, an accident may just be a way of teaching inattentive users a lesson; if you are inattentive, you may get hurt. However, such an attitude seems cynical. Modern pedagogical ethics rule out education by means of inflicting significant suffering.[192] Wanting to teach users a lesson would be paramount to a reintroduction of punishment by sticks in classrooms, which has long and for good reasons been ruled out as an infraction of human dignity.

The notion of responsibility can therefore not serve to apodictically deny having recourse to a more boundedly rational concept of human agency in product liability. It may, however, be accorded some importance in legitimizing a partial reduction of recovery – by way of defenses, such as contributory negligence,[193] erroneously ignored by the *Martinez* court.[194]

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191 J.A. Blumenthal, 'Expert Paternalism' 64 *Florida Law Review* 721, 743–744 (2012); T.D. Wilson, D.B. Centerbar and N. Brekke, 'Mental Contamination and the Debiasing Problem', in Gilovich, Griffin and Kahneman (eds), *supra* n 8, 185, 186.

192 Art 19 of the Convention of the Rights of the Child, G A Res 44/25; Pope Francis, in a patent display of human fallibility, recently held otherwise, condoning the beating of children for educative purposes, see http://w2.vatican.va/content/francesco/it/audiences/2015/documents/papa-francesco_20150204_udienza-generale.html ('Il padre che sa *correggere senza avvilire* è lo stesso che sa proteggere senza risparmiarsi. Una volta ho sentito in una riunione di matrimonio un papà dire: "Io alcune volte devo picchiare un po' i figli ... ma mai in faccia per non avvilirli". Che bello! Ha senso della dignità. Deve punire, lo fa in modo giusto, e va avanti.').

193 See, eg, Schwartz, *supra* n 124, 396–398 (arguing that 'good warnings' should lead to contributory negligence of the plaintiff).

194 In *Uniroyal Goodrich Tire Co* v*Martinez*, for example, Mr Martinez did not perform any safety routines, regardless of danger of explosion. Nonetheless, contributory negligence was not found in the original case: The jury held there was none, despite the fact that the plaintiff leaned over the tire which the warning asked him to refrain from, and the Texas Supreme Court, on a limited standard of review of this factual determination, did not reverse: *Uniroyal Goodrich Tire Co* v *Martinez*, 977 S W 2d 328, 340 (Tex 1998). The notion of responsibility and the factual evidence suggest that the denial of contributory negligence was erroneous, however. The plaintiff certainly had a duty not to mount the tire on wrong rim, which may even cause harm to habitual users of the car, and a duty not to lean over the tire when inflating it. Both duties are dictated by ordinary

At this point, it should be noted that from a normative perspective, bounded rationality should be given a prominent spot in the trade-offs forming the heart of product liability. At the same time, it is clear that this move does not make the intricate problems inherent in this field of law disappear. Courts will have to continue to struggle with the difficult exercise of bringing the relevant concerns into a practical balance. The advantage, however, is that taking bounded rationality into account again provides a basis for more transparent trade-offs, in which the interests of manufacturers and fully rational users do not categorically trump those of inattentive and biased users. The development of US law in this regard paves a way that EU courts should not be hesitant to follow.

III Conclusion

The scientific debate about the existence, direction and intensity of biases in human decision making is bound to continue for the next decades. Legal decisions, however, cannot wait that long. They often have to be taken contemporaneously. Importantly, in many cases presented in this paper they will have to at least implicitly endorse some legal concept of human agency that reflects a specific degree of rationality. This paper therefore consecutively defends the following three propositions:

1. Descriptively, US courts and regulatory agencies increasingly apply boundedly rational concepts of human agency. Surprisingly, despite the surge of behavioral analysis in European academia, EU courts and agencies still, and even increasingly, cling to the rational actor model. A few exceptions on the European and national level tend to confirm this rule.
2. This behavioral divide between the EU and the US calls for a normative evaluation. In the face of empirical uncertainty about the existence, direction and intensity of biases, the most attractive legal concept of human agency is a pluralistic one, assuming the simultaneous presence of boundedly and fully

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care. Mr Martinez breached both duties. Contributory negligence should have been found here, and can be used as a device to balance liability in other cases as well. For an argument against liability for boundedly rational actions, however, see L. Dahan-Katz, 'The Implications of Heuristics and Biases Research on Moral and Legal Responsibility', in N.A. Vincent (ed), *Neuroscience and Legal Responsibility* (New York: Oxford University Press, 2013) 135 (calling for an adjustment of the reasonable person standard in negligence cases in criminal law to shield from liability in cases of bounded rationality); for more on the behavioral analysis of tort law, see, eg, Luppi and Parisi, *supra* n 3, 47.

rational actors. This can be best achieved in an empirically grounded normative concept.

3. The pluralistic perspective urges a revision of the concept of the reasonable consumer, both in US and EU consumer law. Furthermore, it leads to the adoption of a more boundedly rational user concept in product liability.

To elaborate briefly on each of these points: On the descriptive side, in the two areas of law scrutinized in this paper, consumer law and product liability, a surprising divide between the US and the EU was uncovered. US agencies and courts increasingly in these areas ground their concepts of human agency in bounded rationality. In the EU, however, the *inverse* trend toward an ever more rational model of agency is discernible, with only a few exceptions so far. They are confined to competition law at the European level, to national approaches in the UK, and to a much lesser extent to behavioral beginnings in Germany, France and the Netherlands.

From a normative perspective, the US regime follows, with some *caveats*, the generally preferable path in this transatlantic divide. In view of the varied and partially conflicting social science evidence on the degrees of rationality of human behavior, however, this article proposes to opt for a pluralistic framework which accommodates both fully and boundedly rational actors. This pluralistic feature accounts for its flexibility and adaptability to a number of different situations. It thus provides an analytic framework which can be operationalized in concrete legal analysis. The pluralistic concept facilitates transparent tradeoffs that lie at the very core of many legal decisions.

In the field of consumer law, the pluralistic framework urges the revision of the reasonable consumer paradigm in favor of a more boundedly rational, yet pluralistic, consumer concept. In product liability, it suggests the adherence to a more boundedly rational user concept as championed by § 2 cmt l of the *Restatement (Third) of Torts: Products Liability*. Notably, this implies that product warnings may not shield manufacturers from liability. Nevertheless, boundedly rational behavior should potentially lead to the finding of contributory negligence.

In toto, the article provides strong normative and empirical arguments for a continuing interdisciplinary evolution of European private law, in conscious but critical dialogue with the latest analogous developments in US legal theory and private law.

Note: All errors remain entirely my own.

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